

Garching

Max-Planck-Institut für extraterrestrische Physik

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1 Einleitung

Das Max-Planck-Institut für extraterrestrische Physik (MPE) befaßte sich 2014 mit grundlegenden Themen der Astrophysik, die sich sechs großen Bereichen zuordnen lassen: (i) *Großräumige Struktur und Kosmologie*, (ii) *Galaxien und Galaxienentwicklung*, (iii) *Massereiche Schwarze Löcher und Aktive Galaxien*, (iv) *Entstehung von Sternen und Planetensystemen*, (v) *Sternentwicklung und Interstellares Medium* und der (vi) *Physik des Sonnensystems*.

Dabei werden überwiegend experimentelle Methoden angewandt, aber auch theoretische Untersuchungen durchgeführt. Der Name des Instituts bezieht sich einerseits auf den Gegenstand der Forschung; die Physik des Weltraums, andererseits auf die Forschungsmethoden: viele unserer Experimente werden notwendigerweise oberhalb der dichten, absorbierenden Erdatmosphäre mit Flugzeugen, Raketen, Satelliten und Raumsonden durchgeführt. In zunehmendem Maße setzen wir aber, vor allem im optischen und Infrarotbereich, auch Instrumente an erdgebundenen Teleskopen ein.

Methodisch lassen sich die Forschungsaktivitäten des MPE in mehrere Bereiche einteilen. In der beobachtenden Astrophysik, für die am MPE innovative Instrumente gebaut werden, wird die Strahlung entfernter Objekte mit Teleskopen in den Millimeter/Submillimeter-, Infrarot-, Optischen-, Röntgen- und Gammabereich gemessen. Der hierbei überdeckte Teil des elektromagnetischen Spektrums umfaßt mehr als zwölf Dekaden. Die untersuchten Objekte reichen von nahen Kometen bis zu den fernsten Quasaren, von winzigen Neutronensternen bis zu Galaxienhaufen, den größten bekannten Formationen im Kosmos. Theoretische Arbeiten liefern die Grundlagen zum Verständnis und Interpretation der Beobachtungen und Messungen. Die direkte Wechselwirkung von Beobachtern, Experimentatoren und Theoretikern im Hause ist ein Merkmal unseres Arbeitsstils und führt oft im direkten Wechselspiel von Hypothesen und Beobachtungstatsachen zu einem frühen Erkennen von Zusammenhängen und damit zu einer frühzeitigen Identifikation vielversprechender neuer Forschungsrichtungen. Ergänzt werden unsere Forschungsaktivitäten durch Experimente im Labor, mit denen sowohl die aus Theorie und Beobachtungen gewonnenen Ergebnisse überprüft als auch Informationen und Erkenntnisse gewonnen werden, die wiederum in theoretische Modelle und die Dateninterpretation einfließen.

Eine technologische Einrichtung des MPE ist von besonderer Bedeutung: Die 130 m lange Vakuumanlage *Panzer* zum Test von Röntgenteleskopen in Neuried bei München. Fast alle röntgenastronomischen Experimente oder Teile davon wurden in dieser Anlage getestet.

Unter anderem durch diese Einrichtung findet ein Transfer von neuen Verfahren und Methoden in die industrielle Anwendung statt. Im Rahmen unserer Transferaktivitäten hielt das MPE 10 Patente am Ende von 2014.

Neben der Forschung nimmt unser Institut auch universitäre Ausbildungsaufgaben wahr. Mehr als zehn MPE-Wissenschaftler sind als Hochschullehrer an zahlreichen Universitäten tätig und betreuen studentische Forschungsarbeiten, wie z.B. Bachelor-, Master- und Doktorarbeiten. Die Mehrzahl davon an den beiden Münchner Universitäten, aber auch an anderen deutschen Hochschulen und sogar im Ausland. Darüber hinaus veranstalten wir spezielle Seminare und Symposien zu den im Institut behandelten Forschungsgebieten, häufig in Zusammenarbeit mit Universitätsinstituten. Unsere sehr erfolgreiche „International Max-Planck Research School (IMPRS) on Astrophysics“ an der Ludwig-Maximilians-Universität (LMU) München brachte eine wesentliche Intensivierung der Doktorandenausbildung im Raum Garching/München. An dieser im Jahre 2000 gegründeten „Graduate School“ sind neben unserem Institut und dem Max-Planck-Institut für Astrophysik (MPA) noch das Institut für Astronomie und Astrophysik der LMU und die Europäische Südsternwarte beteiligt. Mit typisch 80 Doktoranden in diesem Programm, wovon etwa 35 am MPE arbeiten, gehört die IMPRS on Astrophysics zu den größten Einrichtungen dieser Art weltweit.

2 Personal und Ausstattung

2.1 Personalstand

Direktoren:

Prof. Dr. R. Genzel (Geschäftsführung), Infrarot- und Submillimeter-Astronomie; Prof. Dr. R. Bender, Optische und Interpretative Astronomie; Prof. Dr. P. Caselli, Zentrum für Astrochemische Studien; Prof. Dr. K. Nandra, Hochenergie-Astrophysik; Prof. Dr. G. Haerendel (emeritiert); Prof. Dr. R. Lüst (emeritiert); Prof. Dr. G. Morfill (emeritiert); Prof. Dr. K. Pinkau (emeritiert); Prof. Dr. J. Trümper (emeritiert).

Auswärtige wissenschaftliche Mitglieder:

Prof. Dr. E. van Dishoeck (Universität Leiden, Niederlande); Prof. Dr. V. Fortov (IHED, Moskau, Russland); Prof. Dr. J. Kormendy (University of Texas at Austin, USA); Prof. Dr. R. Z. Sagdeev (University of Maryland, College Park, USA); Prof. Dr. M. Schmidt (CALTECH, Pasadena, USA); Prof. Dr. Y. Tanaka (JSPS, Bonn; MPE, Deutschland); Prof. Dr. C. H. Townes (UC Berkeley, USA).

Fachbeirat:

Prof. Dr. J. Bergeron (Institute d’Astrophysique de Paris, Frankreich); Prof. Dr. M. Colless (Austrian Astronomical Observatory, Australien); Prof. Dr. K. Freeman (Mt. Stromlo Observatory, Australien); Dr. N. Gehrels (NASA/GSFC, USA); Prof. Dr. F. Harrison (CALTECH, USA); Prof. Dr. R. Kennicutt (University of Cambridge, UK); Prof. Dr. E. Quataert (University of California Berkeley, USA); Prof. Dr. G. Stacey (Cornell University, USA).

Fachübergreifende Fachbeiräte:

Prof. Dr. G. Anton (Universität Erlangen-Nürnberg, Deutschland); Prof. Dr. M. Perryman (ESA/ESTEC, Niederlande).

Kuratorium:

Dr. L. Baumgarten (ehemaliges Vorstandsmitglied DLR); Prof. Dr. A. Bode (Vizepräsident TU München); J. Breitkopf (Kayser-Threde GmbH, München); H.-J. Dürrmeier (ehemalig Süddeutscher Verlag, München); Prof. Dr. W. Glatthaar (ehemaliger Präsident der

Universität Witten/Herdecke, Stuttgart, Kuratoriumsvorsitzender); Dr. G. Gruppe (Bayerisches Staatsministerium für Wirtschaft, Infrastruktur, Verkehr und Technologie, München); Prof. Dr. B. Huber (Rektor der LMU München); Dr. M. Mayer (ehemaliges Mitglied des Bundestages, Höhenkirchen); Min.Dir. J. Meyer (Bundesministerium für Wirtschaft und Technologie, Berlin); Prof. Dr. E. Rohkamm (Blohm & Voss GmbH, Hamburg).

Wissenschaftliche Mitarbeiter und Angestellte

A. Infrarot-und Sub-mm-Astronomie

A. Agudo Berbel, Dr. K. Bandara, Dr. S. Berta, Dr. N. Blind, Dr. S. Bruderer, Dr. P. Buschkamp, Dr. A. Contursi, Dr. R. Davies, S. Dengler, Dr. J.A. de Jong, Dr. J. Dexter, Dr. V. Doublier Pritchard, Dr. F. Eisenhauer, Dr. D. Fedele, Dipl.-Phys. H. Feuchtgruber, Dr. N. Förster Schreiber, Dr. S. Gillessen, Dr. J. Grácia Carpio, Dr. M. Habibi, Dr. M. Hartl, S. Harai-Ströbl, A. Kleiser, Dr. Y. Kok, Dr. J. Kurk, Dr. D. Lutz, Dr. T. Müller, Dr. G. Orban de Xivry, S. Osterhage, Dr. T. Ott, Dr. O. Pfuhl, Dr. A. Poglitsch, Dr. W. Raab, Dr. S. Rabien, Dr. D. Rosario, Dr. A. Schrubba, Dr. E. Sturm, Dr. K. Tadaki, Dr. L. Tacconi, Dr. E. Vilenius, Dr. E. Wisnioski, Dr. E. Wuyts, Dr. S. Wuyts, J. Zanker-Smith.

Doktoranden (D)/Master (M):

L. Fuchs (M.), Y. Futamoto (M.), A. Janssen (D.), A. Karska (D.), P. Lang (D.), M.-Y. Lin (D.) M. Lippa (D.) A. Motello (D.), N. Murillo (D.), P. Plewa (D.), M. Rugel (M.), J. Weber (M.).

B. Hochenergie-Astrophysik

Dr. R. Andritschke, Prof. Dr. W. Becker, B. Boller, Prof. Dr. T. Boller, Dr. H. Bräuninger, Dr. M. Brightman, Dr. H. Brunner, Dr. W. Burkert, Dr. V. Burwitz, Dr. S. Carpano, Dr. W. Collmar, Dr. K. Dennerl, Prof. Dr. R. Diehl, Dr. T. Dwelly, Dipl.-Ing. J. Eder, Dr. J. Elliot, V. Emberger, L. Englert, Dr. T. Eraerds, W. Frankenhuizen, Dr. M. Freyberg, Dr. P. Friedrich, Dr. M. Fürmetz, R. Gaida, Dr. A. Georgakakis, Dr. J. Graham, Dr. J. Greiner, Dr. F. Haberl, K. Hartmann, Dipl.-Math. G. Hartner, G. Hauser, Dr. A. von Kienlin, Dr. N. Meidinger, Dr. A. Merloni, Dipl.-Phys. E. Pfeffermann, Dr. M. Porro, Dr. P. Predehl, Dr. A. Rau, Dr. J. Sanders, Dr. S. Savaglio, Dr. P. Schady, Dr. R. Sturm, S. Walther, Dr. G. Weidenspointner, Dr. A. Winter, Dr. X.-L. Zhang.

Doktoranden (D)/Master (M):

A. Bähr (D.), M.G. Bernhardt (D.), J. Buchner (D.), G. Erfanianfar (D.), M. Ghaempanah (D.), F. Hofmann (D.), L.-T. Hsu (D.), P. Hüsemann (M.), G. Khachatryan (D.), F. Knust (D.), P. Maggi (D.), G. Mantovani (D.), B. Menz (D.), M.-L. Menzel (D.), M. Mirkazemi (D.), J. Müller-Seidlitz (D.), T. Prinz (D.), T. Siegert (D.), V. Sudilovsky (D.), M. Tanga (D.), K. Varela (D.), G. Vasilopoulos (D.), A. Weissmann (D.), H.-F. Yu (D.).

C. Zentrum für Astrochemische Studien

Dr. F. Alves de Oliveira, Dr. J. Bailey, Dr. N. Bailey, Dr. L. Bizzocchi, Dr. R. Choudhury, Dr. S. Hocuk, Dr. A. Ivlev, Dr. J. Laas, Dr. V. Lattanzi, Dr. J. Pineda Fornerod, Dr. A. Pon, Dr. O. Sipilä, Dr. W. Thi, Dr. A. Vasyunin, Dr. B. Zhao.

Doktoranden (D)/Master (M):

A. Chacon (D.), A. Punanova (D.), Sokolov (D.)

D. Optische und Interpretative Astronomie

Dr. A. Beffiori, Dr. A. Bode, Dr. C. Bodendorf, Prof. Dr. H. Böhringer, Dipl. Phys. A. Bohnet, Dr. A. Brucalassi, Dr. P. Erwin, Dr. M. Fabricius, Dr. D. Farrow, Dr. A. Galametz, Dr. N. Geis, Prof. Dr. O. Gerhard, O. Goldenbogen, Dr. F. Grupp, I. Hartung, Dr. U. Hopp, C. Ingram, Dr. R. Katterloher, Dr. J. Koppenhöfer, Dr. C.-H. Lee, Dr. X. Mazzalay, Dr. T. Mendel, Dr. A. Monna, Dr. F. Montesano, Dr. B. Muschielok, B. Niebisch, D. Penka, M. Neumann, F. Raison, Dr. R. Saglia, Dr. A. Sanchez, Dr. J. Snigula, Dr. J. Thomas, Dipl.-Ing. C. Vogel, Dr. C. Wegg, I. Weiss.

Doktoranden (D)/Master (M):

M. Blana (D.), J. Chan (D.), S. Chatzopolous (D.), F. Finozzi (D.), M. Fossati (D.), J. Grieb (D.), S. Kulkarni (D.), M. Lippich (M.) A. Longobardi (D.), M. Opitsch (D.), M. Portail (D.), C. Pulsoni (D.), G. Rosotti (M.), S. Rudkee (M.), S. Salazar-Albornoz (D.), T. Simm (M.), I. Söldner-Rembold (M.), P. Wulstein (D.), J. Zendejas (D.).

E. Unabhängige Forschungsgruppen

a) Forschungsgruppe Prof. Dr. A. Burkert

Prof. Dr. A. Burkert, Dr. K. Fierlinger, Dr. M. Schartmann.

Doktoranden (D)/Master (M):

C. Alig (D.), J. Abbellah (D.).

b) Forschungsgruppe Dr. S. Khochfar

Dr. B. Agarwal, Dr. S. Khochfar, Dr. J.-P. Paardekooper.

F. Ingenieurbereiche und Werkstätten

a) Elektrotechnik

Dipl.-Ing. S. Albrecht, Dipl.-Ing. (FH) L. Barl, Dipl.-Ing. (FH) W. Bornemann, Dipl.-Ing. (FH) T. Burghardt, M. Sc. A. Buron, H. Cibooglu, D. Coutinho, A. Emslander, R. Gressmann, Dipl.-Ing. (FH) O. Hälker, Dipl.-Ing. (FH) O. Hans, M. Hengmith, Dipl.-Ing. (FH) S. Kellner, Dipl.-Ing. (FH) W. Kink, S. Krämer, P. Langer, D. Miefner, Dipl.-Ing. (FH) S. Müller, F. Oberauer, Dipl.-Ing. (FH) S. Ott, Dr. M. Plattner (Leitung), Dipl.-Ing. (FH) C. Rau, Dipl.-Ing. (FH) J. Reiffers, P. Reiss, M. Schneider, F. Schrey, K. Tomic, W. Xu, V. Yaroshenko, J. Zanker-Smith, Dipl.-Ing. (FH) J. Ziegleder.

b) Mechanik

R. Bayer, T. Blasi, A. Brara, B. Budau, S. Czempiel, C. Deysenroth, M. Deysenroth, Dipl.-Ing. (FH) K. Dittrich, G. Dietrich, J. Eibl, P. Feldmeier, J. Gahl, Dipl.-Phys. H. Gemperlein, A. Goldbrunner, J. Hartwig, Dipl.-Ing. (FH) M. Haug, F. Haußmann, M. Honsberg, D. Huber, F.-X. Huber, Dipl.-Ing. H. Huber, S. Huber, H.-J. Kestler, R. Mayr-Ihbe, Dipl.-Ing. (FH) B. Mican, Dipl.-Ing. (FH) S. Paßlack Dipl.-Ing. (FH) A. Pflüger, Dipl.-Ing. (FH) D. Pietschner, M. Plangger, C. Rohe, R. Sandmair, A. Schneider, P. Schnell, C. Schreib, Dr. J. Schubert (Leitung), W. Schunn, S. Senftleben, F. Soller, P. Straube, R. Strecker, Dipl.-Ing. L. Tiedemann.

c) Auszubildende

A. Biber, C. Fischer, M. Hiefinger, H. Kellermann, T. Kratschmann, F. Leimböck, S. Lenzewski, T. Liepold, A. Reinold, D. Schuppe.

G. Zentrale DV-Gruppe

H. Baumgartner, Dipl.-Phys. A. Bohnet, A. Kleiser, L. Klose, C. Kollmer, A. Oberauer, Dr. T. Ott, J. Paul, Dipl.-Ing. (FH) R. Sigl, Dr. J. Snigula, Dr. H. Steinle, Dipl.-Ing. E. Wieprecht, Dipl.-Ing. E. Wiezorrek.

H. Öffentlichkeitsarbeit

E. Collmar, Dr. W. Collmar, Dr. H. Hämmerle.

I. Publikationsunterstützung

R. Hauner, R. Mayr-Ihbe, B. Mory.

J. Bibliothek

E. Blank, E. Chmielewski, C. Hardt.

K. Verwaltung und Allgemeine Dienste

C. Altinger, G. Apold, A. Arturo, T. Bauer, M. Bauernfeind, U. Bitzer, U. Cziasto, E. Doll, C. Eicher, M. Ertl, S. Goldbrunner, M. Grasmann, M. Grohmann, H.-P. Gschnell, P. Hingerl, M. Ihle (Leitung), I. Inhofer, T. Jäkel, J. Jirsch, W. Karing, M. Keil, L. Kestler, V. Kliem, E. Kuhwald, E. Maier, L. Mayer, A. Nagy, A. Neun, J. Paschou, M. Peischl, C. Preisler, A. Reither, R. Rochner, E. Rossa, P. Sandtner, B. Scheiner, S. Schwaiger, B. Seyfarth, R. Steinle, L. Thiess, J. Vogt.

2.2 Gäste

Im Jahr 2014 besuchten 49 Gastwissenschaftler das MPE, mit Besuchszeiten von einigen Tagen bis zu einigen Monaten.

3 Preise, Auszeichnungen, Berufungen

Burtscher, L.: DFG Priority Programme Grant SPP 1573, DFG, Bonn, Deutschland, September 2014.

Genzel, R.: Herschel Medal, Royal Astronomical Society, London, Großbritannien, Juni 2014.

Genzel, R.: Order pour le Mérite for Sciences and Arts (OPLM), Bonn, Deutschland, Juni 2014.

Genzel, R.: Großes Verdienstkreuz mit Stern des Verdienstordens der BRD, Berlin, Deutschland, Oktober 2014.

Genzel, R.: Honorary Doctorate, Paris Observatory (OBSPM), Paris, Frankreich, November 2014.

Kanbach, G.: Adjunct Professor, University College Dublin, School of Physics, Dublin, Irland, Juni 2014.

Pon, A.: J.S. Plaskett Gold Medal, Canadian Astronomical Society, Kanada, Juni 2014.

Pon, A.: Governor General's Gold Medal, University of Victoria, Victoria, Kanada, Juni 2014.

van Dishoeck, E.: Induction Leopoldina Academy of Sciences, Halle, Deutschland, März 2014.

van Dishoeck, E.: Lise Meitner Award in Physics, Gothenburg, Schweden, September 2014.

4 Lehrtätigkeit, Prüfungen und Gremientätigkeit

4.1 Lehrtätigkeiten

Becker, W.: Astrophysikalisches Doktorandenseminar mit den Studenten der *International Max-Planck Research School on Astrophysics*, LMU München WS 13/14, SS 14, WS 14/15; Endstadien der Sternentwicklung, LMU München SS 14.

Bender, R.: Astronomisches Kolloquium, LMU München WS 13/14, SS 14, WS 14/15; Astrophysikalisches Grundpraktikum, LMU München WS 13/14, SS 14, WS 14/15; Forschungsprojekt Masterarbeit, Anleitung zum wissenschaftlichen Arbeiten, LMU München WS 13/14, SS 14, WS 14/15; Grundlagen der fortgeschrittenen Astrophysik (Essential of Advanced Astrophysics), LMU München WS 13/14, SS 14, WS 14/15; Ergänzung zur Vorlesung „Grundlagen der fortgeschrittenen Astrophysik“, LMU München WS 13/14, SS 14, WS 14/15; Astrophysikalisches Hauptseminar theoretisch und numerisch orientiert, „Tools in modern astrophysics“, LMU München WS 13/14, SS 14, WS 14/15; Begleitendes Kolloquium zum Astrophysikalisches Hauptseminar theoretisch und numerisch orientiert, LMU München WS 13/14, SS 14, WS 14/15; Astrophysikalisches Hauptseminar experimentell und beobachtungsorientiert, „Tools in modern astrophysics“, LMU München WS

13/14, SS 14, WS 14/15; Begleitendes Kolloquium zum Astrophysikalisches Hauptseminar experimentell und beobachtungsorientiert, LMU München WS 13/14, SS 14, WS 14/15; Projektseminar mit begleitendem Kolloquium „Extragalactic group seminar“, LMU München SS 14; Projektseminar mit begleitenden Kolloquium „Gravitational lensing“, LMU München WS 13/14, SS 14; Projektseminar mit begleitenden Kolloquium „Galaxies“, LMU München WS 13/14, SS 14, WS 14/15; Projektseminar mit begleitenden Kolloquium aus dem Bereich experimenteller Arbeiten und Instrumentenentwicklung in der Astronomie, LMU München WS 13/14, SS 14, WS 14/15; Projektseminar mit begleitenden Kolloquium, vorbereitendes Kolloquium zur Masterarbeit mit Tutorium, Kolloquium und Tutorium aus dem Bereich der Kosmologie, Anleitung zum Wissenschaftlichen Arbeiten, LMU München WS 13/14, SS14, WS 14/15; Projektseminar mit begleitenden Kolloquium, vorbereitendes Kolloquium zur Masterarbeit mit Tutorium, Kolloquium und Tutorium aus dem Bereich experimenteller Arbeiten, Anleitung zum wissenschaftlichen Arbeiten, LMU München WS 13/14, SS 14, WS 14/15; Galaxies, Vorlesung, LMU München WS 14/15; Ergänzung zur Vorlesung „Galaxies“, LMU München WS 14/15.

Boller, Th.: Vertiefung zur Vorlesung Einführung in die Astrophysik, Goethe-Universität Frankfurt SS 14; AGN-Physik, Goethe-Universität Frankfurt WS 14/15.

Diehl, R.: Astrophysics Seminar „Nuclei in the Cosmos“, TU München WS 13/14, SS 14, WS 14/15 (mit Dozenten vom MPE, MPA, LMU, TU); Observational High-Energy Astrophysics, TU München SS 14.

Eisenhauer, F.: Einführung in die Astrophysik, TU München WS 13/14, WS 14/15; High Angular Resolution Astronomy: Telescopes, Adaptive Optics, Interferometry, and more, TU München SS 14.

Gillessen, S.: Astrophysical Seminar, LMU München WS 13/14, SS 14, WS 14/15.

Krause, M.: Dynamik des Interstellaren Mediums, LMU München WS 13/14; Probestudium, LMU München WS 14/15.

Müller, T.: Astronomie, und Kosmologie: Kleinplaneten und Sonnensystem, Lehrerakademie Dillingen SS 14; Physik/Astronomie: Kleinkörper im Sonnensystem, Lehrerakademie Dillingen WS 14/15.

Saglia, R.: Grundlagen der fortgeschrittenen Astrophysik (Essentials of Advanced Astrophysics), LMU München WS 14/15 (mit R. Bender).

5 Wissenschaftliche Arbeiten

Die wissenschaftlichen Aktivitäten am MPE sind organisatorisch in vier große Arbeitsbereiche aufgeteilt, die jeweils von einem Direktor geleitet werden: (1) Infrarot- und Submm/mm Astronomie, (2) Optische und Interpretative Astronomie, (3) Hochenergieastrophysik und (4) Zentrum für Astrochemische Studien. Diese vier Arbeitsbereiche, sowie noch zusätzlich zwei unabhängige Forschungsgruppen, beschäftigen sich – oft bereichsübergreifend – mit unseren sechs großen Forschungsthemen (siehe „Einleitung“). Unsere Wissenschaft ist ausführlich auf unseren Internetseiten (<http://www.mpe.mpg.de>) unter dem Punkt „Forschung“ dargestellt. Wichtige Einzelergebnisse sind unter „MPE Forschungsmeldungen“ in zeitlicher Reihenfolge beschrieben.

6 Akademische Abschlussarbeiten

6.1 Bachelorarbeiten

Abgeschlossen:

Bauer, L.: Alternatives to supermassive black holes in the center of several galaxies. Ludwig-Maximilians-Universität München 2014.

Bodensteiner, J.: High resolution spectroscopy of three evolved massive stars with mid-infrared circumstellar nebulae. Technische Universität München 2014.

Graeff, D.: Messung der Masse des Schwarzen Loches in LMC X-3. Technische Universität München 2014.

Huber, A.: Maser emission as a probe of the masses of black holes at the centers of galaxies. Ludwig-Maximilians-Universität München 2014.

Neri, G.: Charakterisierung eines galaktischen Röntgendoppelsternsystems mit hochauflösender optischer Spektroskopie. Technische Universität München 2014.

Prechtel, M.: Vermessung der Strahlhomogenität an der PANTER Röntgentestanlage. Technische Universität München 2014.

6.2 Masterarbeiten

Abgeschlossen:

Fuchs, L.: Galaxy structure in color: constraints on resolved stellar populations in distant galaxies. Technische Universität München 2014.

Lutz, K.: Accretion and stellar mass growth in low mass galaxies. Technische Universität München 2014.

Müller, F.: Development of a fiber based integral field unit and derivation of the instrumental response function of an existing integral field unit. Ludwig-Maximilians-Universität München 2014.

Plewa, P. M.: The Location of Sgr A*: Improving the Infrared Astrometric Frame for the Galactic Center by Correcting for Image Distortion. Ludwig-Maximilians-Universität München 2014.

6.3 Dissertationen

Abgeschlossen:

Brucalassi, A.: Search for extra-solar planets with high precision radial velocity curves. Ludwig-Maximilians-Universität München 2014.

Großberger, C.: New Developments and Techniques in Radio to X-ray observations of AGN. Friedrich-Alexander-Universität Erlangen-Nürnberg 2014.

Karska, A.: Feedback from deeply embedded low- and high-mass protostars: surveying hot molecular gas with Herschel. MPE/Leiden University 2014.

Orban de Xivry, G.: The ARGOS Wavefront Sensor Detector and Computer, and the Black Hole Growth of Narrow-Line Seyfert 1 Galaxies. Ludwig-Maximilians-Universität München Munich 2014.

Zendejas Dominguez, J.: Searching for transits in the WTS with the difference imaging light curves. Ludwig-Maximilians-Universität München 2014.

7 Tagungen, Projekte am Institut und Beobachtungszeiten

7.1 Tagungen und Veranstaltungen

The Early Life of Stellar Clusters: Formation and Dynamics, Copenhagen, Denmark, 3.11. - 7.11.2014, Organisation: S. Dib, S. Hocuk, P. Padoan, S. P. Zwart, S. Pfalzner, B. Ercoleo, I. Pelupessy, T. Haugbolle..

Exoplanet Observations with the E-ELT 2014, Garching, Germany, 3.2. - 6.2.2014, Organisation: B. Brandl, G. Chauvin, R. Davies, A.-M. Lagrange, M. Meyer, J. Melnick, C. Melo, D. Queloz, I. Snellen, J. Spyromilio, M. Thatte.

Speed and Sensitivity: Expanding Astronomical Horizons with the E-ELT, Galway, Ireland, 13.5. - 16.5.2014, Organisation: I. Hook, A. Shearer, V. Dhillon, A. Slowikowska, R. Mignani, R. Davies, R. Haynes, S. Ramsay.

The Unquiet Universe, Cefalu, Sicily, Italy, 3.6. - 7.6.2014, Organisation: D. Burgarella, F. Combes, R. Davies, J. Dunlop, M. Elvis, F. Fiore, E. Giallongo, M. Haehnelt, P. Madau, E. Piconcelli, A. Grazian.

The Fate of Gas in Galaxies: AGN vs Star Formation, Durham, UK, 28.7. - 1.8.2014, Organisation: D. Alexander, R. Hickox, T. Theuns, A. Alonso-Herrero, F. Bournaud, R. Davies, R. Morganti, J. Mullaney, R. Somerville.

3D2014: Gas and Stars in Galaxies: A Multiwavelength 3D Perspective, Garching, Germany, 10.3. - 14.3.2014, Organisation: M. Bershadsky, M. Cappellari, F. Combes, C. De Breuck, E. Emsellem, N.M. Förster Schreiber, D. Iono, H. Kuntschner, A. Peck, S. Ramsay, B. Koribalski, M. Swinbank, J. Vernet, F. Walter, L. Wisotzki, M. Zwaan.

IAU Symposium 311 - Galaxy Masses as Constraints of Formation Models, Oxford, United Kingdom, 21.7. - 25.7.2014, Organisation: M. Cappellari, S. Courteau, R. Bacon, J. Bland-Hawthorn, A. Brooks, K. Bundy, C. Conroy, G. De Lucia, N.M. Förster Schreiber, C. Maraston, A. Saintonge, A. Shapley, T. Treu, I. Trujillo, F. van den Bosch, S. Yi.

Star Formation Across Space and Time, ESA-ESTEC, The Netherlands, 11.11. - 14.11.2014, Organisation: P. André, S. Eales, D. Elbaz, B. Elmegreen, N. Evans, Y. Fukui, E. Ostriker, G. Pilbratt, N. Scoville, L. Tacconi.

Revolution in Astronomy with ALMA – The Third Year, Tokyo, Japan, 8.12. - 11.12.2014, Organisation: P. Andreani, A. Bolatto, J. Carpenter, S. Casasus, S. Corder, P. Cox, F. Combes, T. Hasegawa, J. Hibbard, S. Iguchi, D. Iono, R. Ivison, K. Johnson, J. Kim, S.-Y. Liu, J. Martin-Pintado, R. Moreno, K. Motohara, R. Neri, L. Nyman, N. Ohashi, T. Oka, R. Plambeck, D. Scott, L. Tacconi, K. Tatematsu (Chair), L. Testi, H. van Langevelde, A. Wootten .

Superbubbles, HI holes and Supershells, Freising, Germany, 10.11. - 12.11.2014, Organisation: M.G.H. Krause, R. Diehl, D. Breitschwerdt, E. Brinks, R.-J. Dettmar, D. Bomans, M. Sasaki.

Splinter meeting J, “The interstellar medium“, Astronomische Gesellschaft, Bamberg, Germany, 25.9.2014, Organisation: M.G.H. Krause, R. Diehl, A. Burkert, M. Gritschneider, M. Schartmann.

Water in Star-forming Regions with Herschel, Rome INAF Observatory, Frascati, Italy, 22.10. - 24.10.2014, Organisation: E.F. van Dishoeck, B. Nisini.

Episodic accretion: Oort workshop 2014, Leiden, the Netherlands, 13.5. - 15.5.2014, Organisation: N.J. Evans, E.F. van Dishoeck.

Dense Cores: Origins, Evolution and Collapse, Monterey, USA, 27.7. - 30.7.2014, Organisation: S. Stahler, P.C. Myers, P. Caselli, G. Fuller, M. Tafalla.

Filamentary Structure in Molecular Clouds, NRAO Charlottesville Headquarters, Virginia, USA, 10.10. - 11.10.2014, Organisation: F. Lo, C. Brogan, P. Caselli, N. Evans, D. Di Francesco, P. Goldsmith, M. Heyer, Z-Y Li, L. Mundy, P. Myers, E. Ostriker, J. Ott, E. Vazquez.

IAU Symposium 311: Galaxy Masses as Constraints of Formation Models, Oxford, UK, 21.07. - 25.07.2014, Organisation: S. Aalto, L. Blitz, L. Bronfman, P. Caselli, F. Combes, Y. Fukui, G. Helou, P. Ho, R. Kennicutt, C. Lonsdale, F. Walter, L. Young, M. Yun.

7.2 Projekte und Kooperationen mit anderen Instituten

Australien

Australian National University: Galaxienentstehung.

Monash University, Melbourne: Nukleare Astrophysik.

Swinburne University of Technology, Victoria: Millisecond Pulsars.

University of Western Sydney: Magellanic Clouds.

Belgien

CSL Liège, Katholieke Universiteit Leuven: Herschel-PACS; INTEGRAL-Spectrometer SPI; SPICA/SAFARI.

Brasilien

Observatorio Nacional, Rio: DES.

Centro Brasileiro de Pesquisas, Rio: DES.

Universidade Federal do Rio: DES.

Universidade de Sao Paulo: Galaxienentstehung.

Canada

Dunlap Observatory, Richmond Hill: First Hydrostatic Cores (FHSCs).

NRC - Herzberg, Ottawa: Turbulence; superbubbles; First Hydrostatic Cores (FHSCs).

University of Alberta, Edmonton (Alberta): Turbulence.

University of Calgary: Turbulence.

University of Victoria, Victoria: Turbulence; superbubbles; First Hydrostatic Cores (FHSCs).

University of Waterloo, Waterloo: Herschel HIFI.

University of Western Ontario, London (Ontario): Turbulence.

Chile

Universidad de Concepcion: Röntgen-Doppelsternsysteme.

Universidad Catolica Santiago: Röntgen-Doppelsternsysteme.

China

Institute for High-Energy Physics (IHEP), Peking: AGN und unidentifizierte Gammaquellen von COMPTEL und INTEGRAL.

University of Hongkong: Strahlungsmechanismen von Pulsaren vom Röntgen bis zum Gammabereich.

Deutschland

Astrophysikalisches Institut Potsdam: eROSITA; XMM-Newton; GAVO; OPTIMA; ARGOS; HETDEX.

DLR-Köln Porz: Rosetta lander (Philae).

European Southern Observatory (ESO), Garching: KMOS Multiobjekt-Spectrograph für VLT; GRAVITY; Galaxienentstehung; ASTRO-WISE; OmegaCAM; MICADO; Nukleare Astrophysik; ERIS; Black Hole Cam; Infrared Dark Clouds.

Fraunhofer Institut für Mikroelektronische Schaltungen und Systeme, Duisburg: Mikroelektronikentwicklungen; CAMEX 64B; JFET-CMOS Prozessor; ATHENA; eROSITA.

Heinrich-Heine-Universität, Düsseldorf: Soft Matter Physics.

Institut für Astronomie und Astrophysik Tübingen (IAAT): XMM-Newton; eROSITA; ATHENA.

Institut für Astrophysik Göttingen: MICADO.

Institut für Festkörperphysik und Werkstoff-Forschung, Dresden: Entwicklung weichmagnetischer Werkstoffe.

Institut für Materialphysik im Weltraum, Köln: Glasübergänge.

Landessternwarte Heidelberg-Königstuhl: Nahinfrarotspektrograph LUCI für LBT; Galaxienentstehung; ARGOS.

Laser Zentrum Hannover: Development of advanced Filters for MICADO; coatings for Gravity; dichroics for ARGOS.

Ludwig-Maximilians-Universität (Universitäts-Sternwarte), München: KMOS; MICADO; HETDEX; eROSITA.

Maier-Leibnitz Laboratorium, Garching: eROSITA.

Max-Planck-Institut für Astronomie, Heidelberg: GRAVITY; LUCI; Herschel-PACS; Pan-STARRS; SDSS; ARGOS; MICADO; EUCLID.

Max-Planck-Institut für Astrophysik, Garching: GAVO; SDSS; OPTIMA; eROSITA; Pre-stellar Cores.

Max-Planck-Institut für Biomedizinische Forschung, Heidelberg: CFEL.

Max-Planck-Institut für Biophysikalische Chemie, Göttingen: CFEL.

Max-Planck-Institut für Kernphysik, Heidelberg: CFEL.

Max-Planck-Institut für Komplexe System, Fritz-Haber Institut, Dresden: CFEL.

Max-Planck-Institut für Physik, Werner Heisenberg Institut, München: MPI Halbleitertlabor, Entwicklung von CCDs; Active Pixeldetektoren (APS); JFET-Elektronik und Drift-detektoren für den Röntgenbereich; CAST; eROSITA.

Max-Planck-Institut für Radioastronomie, Bonn: ARGOS; Black Hole Cam; Molecular Clouds; Turbulence.

Physikalisch-Technische Bundesanstalt Berlin: eROSITA, SPICA-SAFARI, TES Bolometer SQUID-Ausleseschaltung.

Thüringer Landessternwarte Tautenberg: GROND; Gamma-Ray Bursts.

Technische Universität Berlin: Interstellares Medium.

Technische Universität Darmstadt: CAST.

Technische Universität München: Nukleare Astrophysik.

Trans MIT, Gießen: Pulse tube cooler for GRAVITY.

Universität Bochum: LUCI.

Universität Bonn: Test von Pixeldetektoren für ATHENA; ASTRO-WISE; eROSITA, EUCLID.

Universität Düsseldorf: ERC Advanced Grant.

Universität Erlangen (ECAP): eROSITA, ATHENA.

Universität Hamburg: eROSITA; OPTIMA (Flarestars).

Universität Heidelberg: ATHENA; XFEL.

Universität Jena: Isolierte Neutronensterne; Nukleare Astrophysik.

Universität Köln: Galaktisches Zentrum; GRAVITY.

Universität Mannheim: ATHENA; XFEL.

Universität Würzburg: AGADE.

Frankreich

CEA, Saclay: INTEGRAL-Spektrometer SPI; Herschel-PACS; CAST; EUCLID; SPICA; SVOM; Molecular Clouds; ATHENA.

Centre d'Etude Spatiale des Rayonnements (UPS), Toulouse: INTEGRAL-Spektrometer SPI.

IAP Paris: Nukleare Astrophysik.

Laboratoire d'Astrophysique de Marseille (CNRS): EUCLID; Gamma-Ray Bursts.

Laboratoire Univers et Particules de Montpellier, Montpellier: Cosmic-ray propagation in molecular clouds.

IPAG Grenoble: GRAVITY; Astrochemistry.

OAMP Marseille: Herschel-PACS.

Observatoire de Paris-Meudon: GRAVITY; MICADO.

Griechenland

University of Crete and Foundation for Research and Technology Hellas (FORTH), Heraklion: Ausbau und Betrieb der Skinakas Sternwarte; Untersuchung von windakkretierenden Röntgendoppelsternsystemen; Entwicklung und Einsatz des OPTIMA Photometers; optische Identifikation und Monitoring von Röntgen-AGN; Novae.

Großbritannien

Queen's University, Belfast: PanSTARRS.

John Moores University, Liverpool: Himmelsdurchmusterung Galaxienhaufen; Infrared Dark Clouds.

Open University, Milton Keynes: Kataklysmische Veränderliche; Novae; ATHENA.

Rutherford Appleton Laboratory, Council for the Central Laboratory of the Research Councils: SIS-Junctions.

SKA Organisation, Jodrell Bank Observatory, Manchester: First Hydrostatic Cores.

University of Cambridge: DES.

University College London, MSSL: High Energy Pulsars; EUCLID; DES.

University of Durham: KMOS; PanSTARRS.

University of Edinburgh: DES; KMOS; PanSTARRS.

University of Leicester: XMM-Newton Datenanalyse; ATHENA; Swift.

University of Nottingham: DES.

University of Portsmouth: DES.

University of Sussex: DES.

University of Southampton: Magellanic Clouds.

University Oxford: KMOS.

United Kingdom Astronomy Technology Centre (UKATC): EUCLID; KMOS.

Irland

National University of Ireland, Galway: High Time Resolution Astronomy.

University College Dublin, Dublin: Fermi/GBM.

Israel

School of Physics and Astronomy, Wise Observatory, Tel Aviv: Aktive Galaxien; Galaxienentwicklung; Interstellares Medium.

Weizmann Institut, Rehovot: Galaktisches Zentrum.

Italien

Brera Astronomical Observatory: Himmelsdurchmusterung Galaxienhaufen; ATHENA.
 IFCAI-CNR Palermo: XMM-Newton Beobachtungen von Neutronensternen und Pulsaren.
 INAF (Insituto Nazionale di Astrofisica): ATHENA.
 INAF Arcetri: ARGOS; LBT.
 INAF Padua: Herschel-PACS; MICADO; LBT.
 INAF Roma: LBT; Nukleare Astrophysik.
 INAF Trieste: Gamma-Ray Bursts; Fermi/LAT.
 INFR Frascati: SIDDHARTA.
 Istituto di Fisica dello Spazio Interplanetario (CNR), Frascati: Herschel-PACS.
 OAA/LENS Firenze: Herschel-PACS.
 Politecnico di Milano: rauscharme Elektronik; Röntgendetektorenentwicklung.
 University Bologna: EUCLID.

Japan

ISAS, Sagamihara: SPICA-SAFARI.
 Tokio Institute of Technology (TITECH), Ookayama: ASCA/XMM-Newton Beobachtungen von AGN.
 University of Osaka: Astro-H.

Kroatien

Ministry of Science and Technology, Zagreb: CAST.

Niederlande

ESTEC, Noordwijk: XMM-Newton-TS-Spiegelkalibration; CCD Entwicklung; Radiation Performance Instrument; INTEGRAL; EUCLID.
 NOVA Leiden: MICADO.
 Radboud University, Nijmegen: Black Hole Cam.
 SRON Groningen: SPICA-SAFARI.
 SRON, Utrecht: Chandra-LETG; TES für SPICA.
 University of Groningen, Kapteyn Institute: Rekonstruktion der Dichteverteilung im Universum; EUCLID; Dynamical-Chemical Models.

Österreich

Universität und TU Wien: Herschel-PACS; MICADO; ATHENA.
 Universität Innsbruck: MICADO.
 Universität Linz: MICADO.

Polen

Nicolaus Copernicus (ZAMK), Torun: Pulsars Astronomical Centers; ATHENA.
 University Zielona Gora: OPTIMA.

Portugal

SIM Lissabon: GRAVITY.

Russland

Staatliche Technische Universität Bauman, Moscow: Stark gekoppelte Systeme, Time-domain spectroscopy.

Space Research Institute (IKI) of the Russian Academy of Science, Moscow: eROSITA; Spectrum-Röntgen-Gamma.

Skobel'syn Institute of Nuclear Physics, Moscow: Nukleare Astrophysik; Gamma-Ray Bursts; AGADE.

Schweden

University Lund/Observatory: OPTIMA.

Schweiz

CERN, Geneva: CAST.

ETH Zürich: ERIS.

Observatoire de Genève Sauverny, Geneva: ISDC/INTEGRAL; Nukleare Astrophysik; EUCLID.

Universität Basel: Nukleare Astrophysik.

Spanien

Centro de Investigaciones Energeticas, Medioambientales y Tecnologicas: DES.

ESAC, Madrid: XMM-Newton Science Operations Center; INTEGRAL Science Operations Center; Herschel Science Operations Center.

Instituto de Astrofisica de Canarias (IAC), Laguna: Herschel-PACS.

Instituto de Ciencias del Espacio, Bellaterra: DES.

Institut de Fisica d'Altes Energies, Barcelona: DES.

Universität Valencia, Department de Astronomia, Valencia: INTEGRAL-Spektrometer SPI.

Universidad de Zaragoza: CAST.

Observatorio Astronomico de Mallorca: Novae; Kometen.

Taiwan

National Central University, Chungli: PanSTARRS.

Türkei

Bogazici University, Istanbul: CAST.

Ungarn

Konkoly Observatory: Herschel-PACS.

USA

Argonne National Laboratory: DES.

Brookhaven National Laboratory: strahlenharte JFET-Elektronik; strahlenharte Detektoren.

California Inst. of Technology, Pasadena: X-ray survey.

CfA, Cambridge: ATHENA WFI; XMM-Newton/Chandra Kalibration.

Clemson University: Gamma-Ray Bursts; Nukleare Astrophysik.

Fermilab, Batavia: DES.

Harvard University: PanSTARRS.

Harvard-Smithsonian Center for Astrophysics, Cambridge: Molecular cloud cores chemistry and dynamics.

Institute for Astronomy, Hawaii, Honolulu: Galaxienentstehung; PanSTARRS; NIR Kamera für Wendelstein.

Jet Propulsion Laboratory, Pasadena: EUCLID.

Johns Hopkins University: PanSTARRS.

Joint Astronomy Center, Hilo (Hawaii): Turbulence and superbubbles.

Marshall Space Flight Center, Huntsville: Fermi Gamma-Ray Burst Monitor; XMM-Newton und Chandra Beobachtungen von Neutronensternen, Pulsaren und Supernovaüberresten.

NOAO, Tucson: DES.

NASA/Ames Research Center, Mofett Field (CA): MHD shocks.

NASA/Goddard Space Flight Center, Greenbelt, MD: INTEGRAL-Spektrometer SPI; Swift.

Ohio State University, Columbus: DES; LBT.

Pacific Northwest National Laboratory (PNNL), Richland: CAST.

Pennsylvania State University: HETDEX; ATHENA/WFI; Swift.

Research Corporation, Tucson: LBT.

San Jose State University: MHD shocks.

Smithsonian Astrophysical Observatory, Cambridge: Chandra-LETGS; Röntgendoppelsterne in M31.

Space Telescope Science Institute, Baltimore: Galaxienentstehung; PanSTARRS; Turbulence.

Stanford/SLAC: CAMP, DES.

Stanford University: DES, Fermi/LAT; Fermi/GBM.

Texas A & M University, College Station: DES.

Texas State University, San Marcos: HETDEX.

University of Arizona, Tucson: Kosmische Strahlung; SOHO/CELIAS; Planetenentstehung; LBT; ARGOS.

University of California, Berkeley: MPG/UCB-Kollaboration; FAST; INTEGRAL-Spektrometer SPI; Superbubbles.

University of California, Santa Cruz: DES.

University of Chicago: DES.

University of Colorado, Boulder (Co): Superbubbles.

University of Florida, Gainesville (Fl): Infrared Dark Clouds.

University of Illinois at Urbana-Champaign: FIFI-LS; DES.

University of Michigan: DES.

University of Pennsylvania: DES.

University of Pittsburgh: Galaxienentstehung.

University of Texas, Austin: Galaxienentstehung; HETDEX; Turbulence.

University of Toledo: Galaxienentstehung.

7.3 Multinationale Projekte

ARGOS – Laserleitstern für das LBT: API, LSW Heidelberg, MPIA, MPIfR, Germany; University of Arizona, USA.

ASPI, The International Wave Consortium: CNR-IFSI Frascati, Italy; LPCE/CNRS Orleans, France; Dept. of Automatic Control and Systems University of Sheffield, UK.

ATHENA – Advanced Telescope for High Energy Astrophysics: Dänemarks Technische Universität, Dänemark; Nikolaus Kopernikus Astronomical Center, Polen; Universität Wien, Österreich; INAF Italy, Italy; CEA Frankreich, Frankreich; University of Leicester, Open University, UK; Institut für Astronomie und Astrophysik Tübingen, Erlangen Centre for Astroparticle Physics (ECAP), Germany; ESA.

Black Hole Cam ERC Synergy Grant: ESO Garching, MPI für Gravitationsphysik, MPI für Radioastronomie, Germany; Radboud University, JIVE Dwingeloo, The Netherlands.

BOSS – Baryon Oscillation Spectroscopic Survey: SDSS-IV Collaboration.

CAST – CERN Solar Axion Telescope: CERN Geneva Switzerland; TU Darmstadt, MPI für Physik (WHI) München, Germany; Universidad de Zaragoza, Spain; Bogazici University Istanbul, Turkey; Ministry of Science and Technology Zagreb, Croatia; CEA/Saclay DAPNIA/SED, France; Pacific Northwest National Laboratory, Richland, USA.

CDFS – The Chandra Deep Field South: ESO Garching, Astrophysikalisches Institut Potsdam, Germany; IAP Paris, France; Osservatorio Astronomico Trieste; Istituto Nazionale di Fisica Nucleare Trieste, Italy; Associated Universities Washington, Johns Hopkins University Baltimore, Space Telescope Science Institute Baltimore, USA; Center for Astrophysics Hefei, China.

Chandra X-ray Observatory: Marshall Space Flight Center Huntsville, Massachusetts Institute of Technology Cambridge, Smithsonian Astrophysical Observatory Cambridge, USA; Space Research Institute Utrecht, The Netherlands; Universität Hamburg, Germany.

COSMOS – Cosmic Evolution Survey: INAF-Osservatorio Astronomico di Bologna, INAF-Osservatorio Astronomico di Roma, INAF-Osservatorio Astrofisico di Arcetri, INAF/IASF-CNR, Sezione di Milano, IRA-INAF, Bologna, Dipartimento di Astronomia, Università Padova, Dipartimento di Fisica, Università degli Studi Roma Tre, Italy; Harvard-Smithsonian Centre for Astrophysics, Cambridge, Department of Physics, Carnegie Mellon University, Pittsburgh, Institute for Astronomy, University of Hawaii, California Institute of Technology, Pasadena, Department of Astronomy, Yale University, USA; INTEGRAL Science Data Centre, Versoix, Switzerland; Laboratoire d’Astrophysique de Marseille, France.

DES – The Dark Energy Survey: LMU München, Excellence Cluster Universe, Germany; The Fermi National Accelerator Laboratory (Fermilab), University of Chicago, NOAO, University of Michigan, University of Pennsylvania, University of Illinois at Urbana-Champaign, Ohio State University, Texas A&M University, University of California Santa Cruz, Stanford University, SLAC National Accelerator Laboratory, The Lawrence Berkeley National Laboratory, Argonne National Laboratory, USA; University College London, University of Cambridge, University of Edinburgh, University of Portsmouth, University of Sussex, University of Nottingham, UK; Observatorio Nacional, Centro Brasileiro de Pesquisas Fisicas, Universidade Federal do Rio, Brasilien; Instituto de Ciencias dei Espacio, Institut de Fisica d’Altes Energies, Centro de Investigaciones Energeticas Medioambientales y Tecnológicas, Spain.

ERIS – Enhanced Resolution Imager and Spectograph for the VLT: ESO, Germany; ETH Zürich, Schweiz.

eROSITA – extended ROentgen Survey with an Imaging Telescope Array: Universität Tübingen, AIP Potsdam, Universität Hamburg, Remeis-Sternwarte Bamberg, MPA Garching, Germany; IKI Moskau, Russia.

EUCLID – ESA Mission to map the Dark Energy: ESA; CEA Saclay, LAM, France; University Bologna, INAF, Italy; MSSL, Durham University, UKATC, UK; STScI, USA; MPIA Heidelberg, Universität Bonn, Germany.

Fermi/GBM – Fermi Gamma-Ray Burst Monitor: Marshall Space Flight Center Huntsville, University of Huntsville, USA.

Fermi/LAT – Fermi Large Area Telescope: Stanford University Palo Alto, Naval Research Laboratory Washington DC, Sonoma State University Rohnert Park, Lockheed Martin Corporation Palo Alto, University of California Santa Cruz, University of Chicago, University of Maryland Greenbelt, NASA Ames Research Center Moffett Field, NASA Goddard Space Flight Center for High Energy Astrophysics Greenbelt, Boston University, University of Utah Salt Lake City, University of Washington Seattle, SLAC Particle Astrophysics Group Palo Alto, USA; ICTP and INFN Trieste, Istituto Nazionale di Fisica Nucleare Trieste, Italy; University of Tokyo, Japan; CEA Saclay, France.

FP7 Opticon JRA1 - Adaptive Optics: INAF Padova, INAF Arcetri, Italy; LAM Marseille, LAOG Grenoble; LESIA Paris, ONERA Paris, France; KIS Freiburg, MPIA Heidelberg, Germany; NOVA Leiden, The Netherlands; UKATC Edinburgh; University Durham, UK.

GRAVITY – Instrument for VLT Interferometry: MPIA Heidelberg, Universität Köln, ESO, Garching, Germany; SIM Lissabon und Porto, Portugal; IPAG, Grenoble, Observatoire de Paris / Meudon (LESIA), France.

Herschel/PACS – Herschel/Photodetector Array Camera and Spectrometer: CSL Liège, Katholieke Universiteit Leuven, Belgium; MPIA Heidelberg, Universität Jena, Germany; OAA/LENS Firenze, IFSI Roma, OAP Padova, Italy; IAC La Laguna, Spain; Universität und TU Wien, Austria; IGRAP Marseilles, CEA Saclay, France; Konkoly Observatory, Hungary.

HETDEX – Hobby-Eberly Telescope Dark Energy Experiment: University of Texas, Austin, Pennsylvania State University, Texas A&M University, USA; AIP Potsdam, LMU, USM, Germany.

INTAS – Cooperation of Western and Eastern European Scientist: France, Germany, Norway, Russia.

ISDC – INTEGRAL Science Data Centre: Observatoire de Geneva Sauverny, Switzerland; Service d'Astrophysique Centre d'Etudes de Saclay, France; Rutherford Appleton Laboratory Oxon Dept. of Physics University Southampton, UK; Institut für Astronomie und Astrophysik Tübingen, Germany; Danish Space Research Institute Lyngby, Denmark; University College Dublin, Ireland; Istituto di Fisica Milano, Istituto die Astrofisica Spatiale Frascati, Italy; N. Copernikus Astronomical Center Warsaw, Poland; Space Research Institute of the Russian Academy of Sciences Moscow, Russia; Laboratory for High Energy Astrophysics GSFC Greenbelt, USA.

INTEGRAL-Spectrometer SPI: Centre d'Etude Spatiale des Rayonnements (CESR) Toulouse, CEA Saclay Gif-sur-Yvette, France; University de Valencia Burjassot, Spain.

KMOS – A VLT multi-IFU near-infrared spectrograph: Universitätssternwarte München, Germany; University of Durham, ATC Edinburgh, University of Oxford, Bristol University, University of Oxford, UK.

LBT – Large Binocular Telescope Project: MPIA Heidelberg, MPIfR Bonn, Landessternwarte Heidelberg Königstuhl, Astrophysikalisches Institut Potsdam, Germany; University of Arizona Tucson, Ohio State University, Columbus, Research Corporation USA; Osservatorio Astrofisico di Arcetri Firenze, Italy.

Lockman Hole, optical/NIR identifications: Astrophysikalisches Institut Potsdam, ESO Garching, Germany; Istituto di Radioastronomia del CNR Bologna, Italien; Associated Universities Washington, California Institute of Technology Pasadena, Institute for Astronomy Honolulu, Princeton University Observatory, Pennsylvania State University Park, USA; Subaru Telescope NAO Hilo, Japan.

LUCI (Instrument for LBT): LSW Heidelberg, MPIA, Universität Bochum, Germany.

MICADO – Multi-Adaptive Optics Imaging Camera for Deep Observations: LMU, USM, MPIA, IFA Göttingen, Germany; INAF Padova, Italy; Austrian Universities astronomy cooperation (Wien, Innsbruck, Linz), Austria; NOVA, Federation of Dutch University Astronomy Departments, The Netherlands; LESIA Paris, France.

MXT – Microchannel X-Ray Telescope for Gamma-Ray Bursts: CEA, Saclay, France; University of Leicester, UK.

OPTIMA – Optical Pulsar TIMing Analyzer: Astrophysikalisches Institut Potsdam, MPI für Astrophysik, Universität Hamburg, Germany; University of Crete, Greece; University Zielona Gora, Poland; University Lund/Observatory, Schweden.

PanSTARRS – Panoramic Survey Telescope & Rapid Response System: MPIA Heidelberg, Germany; University of Hawaii, Harvard University, Johns Hopkins Univ. Baltimore, MD, USA; Universities of Durham, Edinburgh, Belfast, UK.

SDSS – Sloan Digital Sky Survey: MPA Garching, MPIA Heidelberg, Germany; Univ. of Washington, Seattle, Fermi National Accelerator Laboratory, Batavia, Univ. of Michigan, Ann Arbor, Carnegie Mellon Univ., Pittsburgh, Penn State Univ., University Park, Princeton Univ. Observatory, Princeton, The Institute of Advanced Study Princeton, Space Telescope Science Institute, Baltimore, Johns Hopkins Univ. Baltimore, USA.

SPICA/SAFARI – SPace Infrared telescope for Cosmology and Astrophysics/SpicA FAR-infrared Instrument: University of Tokyo, ISAS/JAXA, Sagamihara, Nagoya University, Japan; SRON, Groningen, TU Delft, The Netherlands; RAL, Dittcot, University of Cardiff, Cambridge University, UK; University of Geneva, ETH Zürich, Switzerland; CEA Grenoble, CESR Toulouse, Sap-CEA Saclay, LAM, Marseille, France; University of Vienna, Austria; MPIA, Heidelberg, PTB, Berlin, Germany; CAB-INTA, Madrid, Spain; IFSI-INAF, Rome, Italy; KU Leuven, Belgium; University of Lethbridge, Canada; NUI Maynooth, Ireland.

Swift – Gamma-Ray Burst Mission: NASA/GSFC Greenbelt, Penn State University, USA; University of Leicester, Mullard Space Science Laboratory London, UK; Osservatorio Astronomico Brera, Italy.

XMM-Newton/Survey Science Center (SSC): Astrophysikalisches Institut Potsdam, Germany; SAP Saclay, CDS Strasbourg, CESR Toulouse, France; University of Leicester, Institute of Astronomy Cambridge, MSSL London, UK.

XMM-Newton/European Photo Imaging Camera (EPIC): SAP Saclay, IAS Orsay, CESR Toulouse, France; University of Leicester, University Birmingham, UK; CNR Mailand-Palermo-Bologna-Frascati, Osservatorio Astronomico Mailand, Italy; Institut für Astronomie und Astrophysik Tübingen, Germany.

7.4 Projekte mit der Industrie

3d shape GmbH, Erlangen: Metrology for slumped glass mirror study.

4D Engineering, Gilching, Germany: Software development for GRAVITY.

ABN GmbH, Neuried: Betreuung der Testanlage PANTER.

af inventions, Braunschweig: FPGA programmierung for eROSITA.

Array Electronics, Egmanting: DAQ development OPTIMA.

BASF Coatings AG, Münster: Untersuchung der Streueigenschaften von Mikropartikeln.

Bonerz engineering, Weiler-Simmerberg: Platinenentwicklung, Elektronikentwicklung.

Buchberger GmbH, Tuchenbach: Fertigung Strukturteile für PANTER-Manipulatore.

Cryovac, Troisdorf: Cryostat for SPICA-SAFARI detector assembly tests.

ESL GmbH, Berlin: Fertigung von Leiterplatten.

Freyer GmbH, Tuningen: PANTER; parts for LUCI; eROSITA.

Guido Lex Werkzeugbau GmbH, Miesbach: Strukturteile für LUCI; eROSITA.

Hans Englett OHG, Berlin: Fertigung von Frontplatten und Meßvorrichtungen.

HPS München: Multi-Layer Insulation (MLI) for eROSITA.

IABG, Ottobrunn: Umgebungs-Tests eROSITA.

Ingenieurbüro Buttler, Essen: Front-End Elektronikentwicklung für ATHENA und eROSITA.

Ingenieurbüro Josef Eder, Hilgertshausen: System Engineering for eROSITA; GRAVITY.

Ingenieurbüro pfma, Haar-Salmdorf: SAFARI.

Ingenieurbüro Weisz, München: Design und Konstruktion für LUCI und ERIS.

Invent GmbH, Braunschweig: CFRP-Telescopestructure for eROSITA.

IRIDIAN Spectral Technologies, Ottawa, Canada: Fitters for ERIS Spectrometer.

Korth Kristalle GmbH, Kiel: Lenses for ERIS Spectrometer.

Kugler GmbH, Salem: GRAVITY.

Laserjob GmbH, Grafrath: Entwicklung Röntgenbaffle für eROSITA.

Luxel Corporation, USA: Filter for eROSITA.

Media Lavio Technologies, Borisio Parini, Italy: eROSITA mirror system.

MBM Maschinenbau, Mühlldorf: eROSITA Container.

MENLO Systems, Martinsried, Germany: Metrology Laser for GRAVITY.

MOOG Inc., East Aurora, USA: high pressure valves for eROSITA.

Oxford Instruments, UK: Sub-Kelvin Kühler für SPICA-Safari.

PNSensor, München: Entwicklung und Fertigung von Halbleiterdetektoren; Montage von Halbleiterdetektorsystemen; ARGOS.

RUAG Austria: Teleskop-Deckel-Mechanismus für eROSITA.

Technotron, Lindau: Entwicklung und Fertigung der Platinen Layouts für eROSITA.

TransMIT, Giessen, Germany: pulse tube cooler for GRAVITY.

WINLIGHT OPTICS, Pertuis, France: Beam analyzer optics for GRAVITY.

ZÜND Precision Optics, Diepoldsau, Switzerland: roof prisms for GRAVITY.

8 Veröffentlichungen

8.1 In Zeitschriften und Büchern

- Aasi, J., B.P. Abbott, R. Abbott, ..., A. v. Kienlin: Search for Gravitational Waves Associated with γ -ray Bursts Detected by the Interplanetary Network. *Phys. Rev. Lett.* 113, 011102 (2014).
- Achitouv, I., C. Wagner, J. Weller and Y. Rasera: Computation of the halo mass function using physical collapse parameters: application to non-standard cosmologies. *J. of Cosmology and Astroparticle Phys.* 10, 77 (2014).
- Ackermann, M., A. Albert, W.B. Atwood, ..., A.W. Strong, et al.: The Spectrum and Morphology of the Fermi Bubbles. *Ap. J.* 793, 64 (2014).

- Ackermann, M., M. Ajello, A. Albert, ..., A.W. Strong, et al.: Inferred Cosmic-Ray Spectrum from Fermi Large Area Telescope γ -Ray Observations of Earth's Limb. *Phys. Rev. Lett.* 112, 151103 (2014).
- Ackermann, M., M. Ajello, A. Albert, ..., A.W. Strong, et al.: Search for Cosmic-Ray-induced Gamma-Ray Emission in Galaxy Clusters. *Ap. J.* 787, 18 (2014).
- Ackermann, M., M. Ajello, K. Asano, ..., A. Rau, ..., A. von Kienlin, et al.: Fermi-LAT Observations of the Gamma-Ray Burst GRB 130427A. *Science* 343, 42-47 (2014).
- Adams, J.J., J.D. Simon, M.H. Fabricius, R.C.E. van den Bosch, J.C. Barentine, R. Bender, K. Gebhardt, G.J. Hill, J.D. Murphy, R.A. Swaters, J. Thomas and G. van de Ven: Dwarf Galaxy Dark Matter Density Profiles Inferred from Stellar and Gas Kinematics. *Ap. J.* 789, 63 (2014).
- Agarwal, B., C. Dalla Vecchia, J.L. Johnson, S. Khochfar and J.-P. Paardekooper: The First Billion Years project: birthplaces of direct collapse black holes. *Mon. Not. R. Astron. Soc.* 443, 648-657 (2014).
- Ahn, C.P., R. Alexandroff, C. Allende Prieto, S. Bailey, et al.: The Tenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Apache Point Observatory Galactic Evolution Experiment. *Ap. J. Supp. Ser.* 211, 17 (2014).
- Ajello, M., R.W. Romani, D. Gasparrini, M.S. Shaw, J. Bolmer, G. Cotter, J. Finke, J. Greiner, S.E. Healey, O. King, W. Max-Moerbeck, P.F. Michelson, W.J. Potter, A. Rau, A.C.S. Readhead, J.L. Richards and P. Schady: The Cosmic Evolution of Fermi BL Lacertae Objects. *Ap. J.* 780, 73 (2014).
- Alatalo, K., K. Nyland, G. Graves, S. Deustua, K. Shapiro Griffin, P.-A. Duc, M. Cappellari, R.M. McDermid, T.A. Davis, A.F. Crocker, L.M. Young, P. Chang, N. Scott, S.L. Cales, E. Bayet, L. Blitz, M. Bois, F. Bournaud, M. Bureau, R.L. Davies, P.T. de Zeeuw, E. Emsellem, S. Khochfar, D. Krajnović, H. Kuntschner, R. Morganti, T. Naab, T. Oosterloo, M. Sarzi, P. Serra and A.-M. Weijmans: NGC 1266 as a Local Candidate for Rapid Cessation of Star Formation. *Ap. J.* 780, 186 (2014).
- Alexander, T. and O. Pfuhl: Constraining the Dark Cusp in the Galactic Center by Long-period Binaries. *Ap. J.* 780, 148 (2014).
- Allevato, V., A. Finoguenov, F. Civano, N. Cappelluti, F. Shankar, T. Miyaji, G. Hasinger, R. Gilli, G. Zamorani, G. Lanzuisi, M. Salvato, M. Elvis, A. Comastri and J. Silverman: Clustering of Moderate Luminosity X-Ray-selected Type 1 and Type 2 AGNs at $Z \sim 3$. *Ap. J.* 796, 4 (2014).
- Amorín, R., V. Sommariva, M. Castellano, ..., M. Salvato, et al.: Discovering extremely compact and metal-poor, star-forming dwarf galaxies out to $z \sim 0.9$ in the VIMOS Ultra-Deep Survey. *Astron. Astrophys.* 568, L8 (2014).
- Andersen, M., W.-F. Thi, J. Steinacker and N. Tothill: A common column density threshold for scattering at $3.6 \mu\text{m}$ and water-ice in molecular clouds. *Astron. Astrophys.* 568, L3 (2014).
- Anderson, L., E. Aubourg, S. Bailey, ..., A.G. Sánchez, et al.: The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: measuring D_A and H at $z = 0.57$ from the baryon acoustic peak in the Data Release 9 spectroscopic Galaxy sample. *Mon. Not. R. Astron. Soc.* 439, 83-101 (2014).
- Anderson, L., É. Aubourg, S. Bailey, ..., F. Montesano, ..., A.G. Sánchez, et al.: The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: baryon acoustic oscillations in the Data Releases 10 and 11 Galaxy samples. *Mon. Not. R. Astron. Soc.* 441, 24-62 (2014).
- André, P., C. Baccigalupi, A. Banday, ..., G. Chon, et al.: PRISM (Polarized Radiation Imaging and Spectroscopy Mission): an extended white paper. *J. of Cosmology and Astroparticle Phys.* 2, 6 (2014).

- Aresu, G., I. Kamp, R. Meijerink, M. Spaans, S. Vicente, L. Podio, P. Voitke, F. Menard, W.-F. Thi, M. Güdel and A. Liebhart: [O I] disk emission in the Taurus star-forming region. *Astron. Astrophys.* 566, A14 (2014).
- Arik, M., S. Aune, K. Barth, ..., H. Bräuninger, et al.: Search for Solar Axions by the CERN Axion Solar Telescope with He3 Buffer Gas: Closing the Hot Dark Matter Gap. *Phys. Rev. Lett.* 112, 091302 (2014).
- Arévalo, P., F.E. Bauer, S. Puccetti, ..., M. Brightman, et al.: The 2-79 keV X-Ray Spectrum of the Circinus Galaxy with NuSTAR, XMM-Newton, and Chandra: A Fully Compton-thick Active Galactic Nucleus. *Ap. J.* 791, 81 (2014).
- Awad, Z., S. Viti, E. Bayet and P. Caselli: Deuterium chemistry of dense gas in the vicinity of low-mass and massive star-forming regions. *Mon. Not. R. Astron. Soc.* 443, 275-287 (2014).
- Bailey, J.D.: Measuring the surface magnetic fields of magnetic stars with unresolved Zeeman splitting. *Astron. Astrophys.* 568, A38 (2014).
- Balog, Z., T. Müller, M. Nielbock, B. Altieri, U. Klaas, J. Blommaert, H. Linz, D. Lutz, A. Moór, N. Billot, M. Sauvage and K. Okumura: The Herschel-PACS photometer calibration. Point-source flux calibration for scan maps. *Experimental Astronomy* 37, 129-160 (2014).
- Balogh, M.L., S.L. McGee, A. Mok, D.J. Wilman, A. Finoguenov, R.G. Bower, J.S. Mulchaey, L.C. Parker and M. Tanaka: The GEEC2 spectroscopic survey of Galaxy groups at $0.8 < z < 1$. *Mon. Not. R. Astron. Soc.* 443, 2679-2694 (2014).
- Baloković, M., A. Comastri, F.A. Harrison, ..., M. Brightman, et al.: The NuSTAR View of Nearby Compton-thick Active Galactic Nuclei: The Cases of NGC 424, NGC 1320, and IC 2560. *Ap. J.* 794, 111 (2014).
- Barentsen, G., H.J. Farnhill, J.E. Drew, ..., S. Scaringi, et al.: The second data release of the INT Photometric H α Survey of the Northern Galactic Plane (IPHAS DR2). *Mon. Not. R. Astron. Soc.* 444, 3230-3257 (2014).
- Barrière, N.M., J.A. Tomsick, F.K. Baganoff, S.E. Boggs, F.E. Christensen, W.W. Craig, J. Dexter, B. Grefenstette, C.J. Hailey, F.A. Harrison, et al.: NuSTAR Detection of High-energy X-Ray Emission and Rapid Variability from Sagittarius A* Flares. *ApJ* 786, 46 (2014).
- Barro, G., S.M. Faber, P.G. Pérez-González, ..., S. Wuyts, ..., M. Salvato, et al.: CANDELS3DHST: Compact SFGs at $z \sim 2-3$, the Progenitors of the First Quiescent Galaxies. *Ap. J.* 791, 52 (2014).
- Bassett, R., K. Glazebrook, D.B. Fisher, A.W. Green, E. Wisnioski, D. Obreschkow, E.M. Cooper, R.G. Abraham, I. Damjanov and P.J. McGregor: DYNAMO - II. Coupled stellar and ionized-gas kinematics in two low-redshift clumpy discs. *Mon. Not. R. Astron. Soc.* 442, 3206-3221 (2014).
- Bayliss, M.B., J.R. Rigby, K. Sharon, E. Wuyts, M. Florian, M.D. Gladders, T. Johnson and M. Oguri: The Physical Conditions, Metallicity and Metal Abundance Ratios in a Highly Magnified Galaxy at $z = 3.6252$. *Ap. J.* 790, 144 (2014).
- Bayliss, M.B., M.L.N. Ashby, J. Ruel, ..., J.J. Mohr, et al.: SPT-CL J2040-4451: An SZ-selected Galaxy Cluster at $z = 1.478$ with Significant Ongoing Star Formation. *Ap. J.* 794, 12 (2014).
- Beifiori, A., D. Thomas, C. Maraston, ..., R.P. Saglia, R. Bender, et al.: Redshift Evolution of the Dynamical Properties of Massive Galaxies from SDSS-III/BOSS. *Ap. J.* 789, 92 (2014).
- Bel, J., C. Marinoni, B.R. Granett, ..., S. Phleps, et al.: The VIMOS Public Extragalactic Redshift Survey (VIPERS). Ω_{m0} from the galaxy clustering ratio measured at z

- ~ 1. *Astron. Astrophys.* 563, A37 (2014).
- Beutler, F., S. Saito, H.-J. Seo, J. Brinkmann, K.S. Dawson, D.J. Eisenstein, A. Font-Ribera, S. Ho, C.K. McBride, F. Montesano, W.J. Percival, A.J. Ross, N.P. Ross, L. Samushia, D.J. Schlegel, A.G. Sánchez, J.L. Tinker and B.A. Weaver: The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: testing gravity with redshift space distortions using the power spectrum multipoles. *Mon. Not. R. Astron. Soc.* 443, 1065-1089 (2014).
- Beutler, F., S. Saito, J.R. Brownstein, C.-H. Chuang, A.J. Cuesta, W.J. Percival, A.J. Ross, N.P. Ross, D.P. Schneider, L. Samushia, A.G. Sánchez, H.-J. Seo, J.L. Tinker, C. Wagner and B.A. Weaver: The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: signs of neutrino mass in current cosmological data sets. *Mon. Not. R. Astron. Soc.* 444, 3501-3516 (2014).
- Birkby, J.L., M. Cappetta, P. Cruz, J. Koppenhoefer, ..., R. Saglia, et al.: WTS-2 b: a hot Jupiter orbiting near its tidal destruction radius around a K dwarf. *Mon. Not. R. Astron. Soc.* 440, 1470-1489 (2014).
- Bizzocchi, L., P. Caselli, S. Spezzano and E. Leonardo: Deuterated methanol in the pre-stellar core L1544. *Astron. Astrophys.* 569, A27 (2014).
- Bode, J.N. and C. Wegg: Production of EMRIs in supermassive black hole binaries. *Mon. Not. R. Astron. Soc.* 438, 573-589 (2014).
- Boffin, H.M.J., M. Hillen, J.P. Berger, A. Jorissen, N. Blind, J.B. Le Bouquin, J. Mikolajewska and B. Lazareff: Roche-lobe filling factor of mass-transferring red giants: the PIONIER view. *Astron. Astrophys.* 564, A1 (2014).
- Boissay, R., S. Paltani, G. Ponti, S. Bianchi, M. Cappi, J.S. Kaastra, P.-O. Petrucci, N. Arav, G. Branduardi-Raymont, E. Costantini, J. Ebrero, G.A. Kriss, M. Mehdipour, C. Pinto and K.C. Steenbrugge: Multiwavelength campaign on Mrk 509. XIII. Testing ionized-reflection models on Mrk 509. *Astron. Astrophys.* 567, A44 (2014).
- Boller, T., M. Roth, R. González Felipe, A. Pérez Martínez, D. Hadijimichef and C.A. Zen Vasconcello: Editors' note. *Astron. Nachr.* 335, 221 (2014).
- Bongiorno, A., R. Maiolino, M. Brusa, A. Marconi, E. Piconcelli, A. Lamastra, M. Cano-Díaz, A. Schulze, B. Magnelli, C. Vignali, F. Fiore, N. Menci, G. Cresci, F. La Franca and A. Merloni: The M_{BH} - M_* relation for X-ray-obscured, red QSOs at $1.2 < z < 2.6$. *Mon. Not. R. Astron. Soc.* 443, 2077-2091 (2014).
- Boselli, A., L. Cortese, M. Boquien, S. Boissier, B. Catinella, C. Lagos and A. Saintonge: Cold gas properties of the Herschel Reference Survey. II. Molecular and total gas scaling relations. *Astron. Astrophys.* 564, A66 (2014).
- Boselli, A., L. Cortese, M. Boquien, S. Boissier, B. Catinella, G. Gavazzi, C. Lagos and A. Saintonge: Cold gas properties of the Herschel Reference Survey. III. Molecular gas stripping in cluster galaxies. *Astron. Astrophys.* 564, A67 (2014).
- Bozzetto, L.M., P.J. Kavanagh, P. Maggi, M.D. Filipović, M. Stupar, Q.A. Parker, W.A. Reid, M. Sasaki, F. Haberl, D. Urošević, J. Dickel, R. Sturm, R. Williams, M. Ehle, R. Gruendl, Y.-H. Chu, S. Points and E.J. Crawford: Multifrequency study of a new Fe-rich supernova remnant in the Large Magellanic Cloud, MCSNR J0508-6902. *Mon. Not. R. Astron. Soc.* 439, 1110-1124 (2014).
- Bradley, L.D., A. Zitrin, D. Coe, R. Bouwens, M. Postman, I. Balestra, C. Grillo, A. Monna, P. Rosati, S. Seitz, et al.: CLASH: A Census of Magnified Star-forming Galaxies at $z \sim 6-8$. *Ap. J.* 792, 76 (2014).
- Brightman, M., K. Nandra, M. Salvato, L.-T. Hsu, J. Aird and C. Rangel: Compton thick active galactic nuclei in Chandra surveys. *Mon. Not. R. Astron. Soc.* 443, 1999-2017 (2014).

- Brothwell, R.D., C.A. Watson, G. Hébrard, ..., V. Burwitz, et al.: A window on exoplanet dynamical histories: Rossiter-McLaughlin observations of WASP-13b and WASP-32b. *Mon. Not. R. Astron. Soc.* 440, 3392-3401 (2014).
- Brucalassi, A., L. Pasquini, R. Saglia, M.T. Ruiz, P. Bonifacio, L.R. Bedin, K. Biazzo, C. Melo, C. Lovis and S. Randich: Three planetary companions around M 67 stars. *Astron. Astrophys.* 561, L9 (2014).
- Bruderer, S., N. van der Marel, E.F. van Dishoeck and T.A. van Kempen: Gas structure inside dust cavities of transition disks: Ophiuchus IRS 48 observed by ALMA. *Astron. Astrophys.* 562, A26 (2014).
- Brünken, S., O. Sipilä, E.T. Chambers, J. Harju, P. Caselli, O. Asvany, C.E. Honingh, T. Kamiński, K.M. Menten, J. Stutzki and S. Schlemmer: H₂D⁺ observations give an age of at least one million years for a cloud core forming Sun-like stars. *Nature* 516, 219-221 (2014).
- Buchner, J., A. Georgakakis, K. Nandra, L. Hsu, C. Rangel, M. Brightman, A. Merloni, M. Salvato, J. Donley and D. Kocevski: X-ray spectral modelling of the AGN obscuring region in the CDFS: Bayesian model selection and catalogue. *Astron. Astrophys.* 564, A125 (2014).
- Buchner, J.: A statistical test for Nested Sampling algorithms. *Statistics and Computing*, URL:<http://link.springer.com/article/10.1007/s11222-014-9512-y>, (2014).
- Burgess, J.M., R.D. Preece, V. Connaughton, M.S. Briggs, A. Goldstein, P.N. Bhat, J. Greiner, D. Gruber, A. Kienlin, et al.: Time-resolved Analysis of Fermi Gamma-Ray Bursts with Fast- and Slow-cooled Synchrotron Photon Models. *Ap. J.* 784, 17 (2014).
- Béthermin, M., M. Kilbinger, E. Daddi, ..., D. Lutz, et al.: Clustering, host halos, and environment of $z \sim 2$ galaxies as a function of their physical properties. *Astron. Astrophys.* 567, A103 (2014).
- Böhringer, H., G. Chon and C.A. Collins: The extended ROSAT-ESO Flux Limited X-ray Galaxy Cluster Survey (REFLEX II). IV. X-ray luminosity function and first constraints on cosmological parameters. *Astron. Astrophys.* 570, A31 (2014).
- Canning, R.E.A., J.E. Ryon, J.S. Gallagher, R. Kotulla, R.W. O'Connell, A.C. Fabian, R.M. Johnstone, C.J. Conselice, A. Hicks, D. Rosario and R.F.G. Wyse: Filamentary star formation in NGC 1275. *Mon. Not. R. Astron. Soc.* 444, 336-349 (2014).
- Carmona, A., C. Pinte, W.F. Thi, M. Benisty, F. Ménard, C. Grady, I. Kamp, P. Woitke, J. Olofsson, A. Roberge, S. Brittain, G. Duchêne, G. Meeus, C. Martin-Zaïdi, B. Dent, J.B. Le Bouquin and J.P. Berger: Constraining the structure of the transition disk HD 135344B (SAO 206462) by simultaneous modeling of multiwavelength gas and dust observations. *Astron. Astrophys.* 567, A51 (2014).
- Ceccarelli, C., C. Dominik, A. López-Sepulcre, M. Kama, M. Padovani, E. Caux and P. Caselli: Herschel Finds Evidence for Stellar Wind Particles in a Protostellar Envelope: Is This What Happened to the Young Sun?. *Ap. J. Lett.* 790, L1 (2014).
- Charbonnel, C., W. Chantreau, M. Krause, F. Primas and Y. Wang: Are there any first-generation stars in globular clusters today?. *Astron. Astrophys.* 569, L6 (2014).
- Chen, J.-H., P.F. Goldsmith, S. Viti, R. Snell, D.C. Lis, A. Benz, E. Bergin, J. Black, P. Caselli, P. Encrenaz, E. Falgarone, J.R. Goicoechea, Å. Hjalmarson, D. Hollenbach, M. Kaufman, G. Melnick, D. Neufeld, L. Pagani, F. van der Tak, E. van Dishoeck and U.A. Yildiz: Herschel HIFI Observations of O₂ toward Orion: Special Conditions for Shock Enhanced Emission. *Ap. J.* 793, 111 (2014).
- Chitsazzadeh, S., J. Di Francesco, S. Schnee, R.K. Friesen, Y. Shimajiri, G.I. Langston, S.I. Sadavoy, T.L. Bourke, E.R. Keto, J.E. Pineda, S. Takakuwa and K. Tatematsu: Physical and Chemical Characteristics of L1689-SMM16, an Oscillating Prestellar Core in Ophiuchus. *Ap. J.* 790, 129 (2014).

- Chon, G., H. Böhringer, C.A. Collins and M. Krause: Characterising superclusters with the galaxy cluster distribution. *Astron. Astrophys.* 567, A144 (2014).
- Choquet, É., J. Menu, G. Perrin, F. Cassaing, S. Lacour and F. Eisenhauer: Comparison of fringe-tracking algorithms for single-mode near-infrared long-baseline interferometers. *Astron. Astrophys.* 569, A2 (2014).
- Cicone, C., R. Maiolino, E. Sturm, J. Graciá-Carpio, C. Feruglio, R. Neri, S. Aalto, R. Davies, F. Fiore, J. Fischer, S. García-Burillo, E. González-Alfonso, S. Hailey-Dunsheath, E. Piconcelli and S. Veilleux: Massive molecular outflows and evidence for AGN feedback from CO observations. *Astron. Astrophys.* 562, A21 (2014).
- Clavel, M., S. Soldi, R. Terrier, V. Tatischeff, G. Maurin, G. Ponti, A. Goldwurm and A. Decourchelle: Variation of the X-ray non-thermal emission in the Arches cloud. *Mon. Not. R. Astron. Soc.* 443, L129-L133 (2014).
- Clerc, N., C. Adami, M. Lieu, B. Maughan, F. Pacaud, M. Pierre, T. Sadibekova, G.P. Smith, P. Valageas, B. Altieri, C. Benoist, S. Maurogordato and J.P. Willis: The XMM-LSS survey: the Class 1 cluster sample over the extended 11 deg² and its spatial distribution. *Mon. Not. R. Astron. Soc.* 444, 2723-2753 (2014).
- Cole, D.R., V.P. Debattista, P. Erwin, S.W.F. Earp and R. Roškar: The formation of stellar nuclear discs in bar-induced gas inflows. *Mon. Not. R. Astron. Soc.* 445, 3352-3369 (2014).
- Collmar, W. and S. Zhang: LS 5039 - the counterpart of the unidentified MeV source GRO J1823-12. *Astron. Astrophys.* 565, A38 (2014).
- Combes, F., S. García-Burillo, V. Casasola, L.K. Hunt, M. Krips, A.J. Baker, F. Boone, A. Eckart, I. Marquez, R. Neri, E. Schinnerer and L.J. Tacconi: ALMA reveals the feeding of the Seyfert 1 nucleus in NGC 1566. *Astron. Astrophys.* 565, A97 (2014).
- Connolly, S.D., I.M. McHardy and T. Dwelly: Long-term wind-driven X-ray spectral variability of NGC 1365 with Swift. *Mon. Not. R. Astron. Soc.* 440, 3503-3510 (2014).
- Cooke, E.A., N.A. Hatch, S.I. Muldrew, E.E. Rigby and J.D. Kurk: A $z = 2.5$ protocluster associated with the radio galaxy MRC 2104-242: star formation and differing mass functions in dense environments. *Mon. Not. R. Astron. Soc.* 440, 3262-3274 (2014).
- Couëdel, L., S. Zhdanov, V. Nosenko, A.V. Ivlev, H.M. Thomas and G.E. Morfill: Synchronization of particle motion induced by mode coupling in a two-dimensional plasma crystal. *Physical Review E* 89, 053108 (2014).
- Coutens, A., J.K. Jørgensen, M.V. Persson, E.F. van Dishoeck, C. Vastel and V. Taquet: High D₂O/HDO Ratio in the Inner Regions of the Low-mass Protostar NGC 1333 IRAS2A. *Ap. J. Lett.* 792, L5 (2014).
- Crawford, E.J., M.D. Filipović, R.L. McEntaffer, T. Brantseg, K. Heitritter, Q. Roper, F. Haberl and D. Urošević: HFPK 334: An Unusual Supernova Remnant in the Small Magellanic Cloud. *Astron. J.* 148, 99 (2014).
- Crawford, T.M., K.K. Schaffer, S. Bhattacharya, ..., J.J. Mohr, et al.: A Measurement of the Secondary-CMB and Millimeter-wave-foreground Bispectrum using 800 deg² of South Pole Telescope Data. *Ap. J.* 784, 143 (2014).
- Cucciati, O., G. Zamorani, B.C. Lemaux, ..., M. Salvato, et al.: Discovery of a rich protocluster at $z = 2.9$ and associated diffuse cold gas in the VIMOS Ultra-Deep Survey (VUDS). *Astron. Astrophys.* 570, A16 (2014).
- Cyganowski, C.J., C.L. Brogan, T.R. Hunter, D. Graninger, K.I. Öberg, A. Vasyunin, Q. Zhang, R. Friesen and S. Schnee: G11.92-0.61-MM2: A Bonafide Massive Prestellar Core?. *Ap. J. Lett.* 796, L2 (2014).
- D'Elia, V., J.P.U. Fynbo, P. Goldoni, ..., S. Savaglio, et al.: VLT/X-shooter spectroscopy of the GRB 120327A afterglow. *Astron. Astrophys.* 564, A38 (2014).

- Dannerbauer, H., J.D. Kurk, C. de Breuck, D. Wylezalek, J.S. Santos, Y. Koyama, N. Seymour, M. Tanaka, N. Hatch, B. Altieri, D. Coia, A. Galametz, T. Kodama, G. Miley, H. Röttgering, M. Sanchez-Portal, I. Valtchanov, B. Venemans and B. Ziegler: An excess of dusty starbursts related to the Spiderweb galaxy. *Astron. Astrophys.* 570, A55 (2014).
- Davies, R.I., W. Maciejewski, E.K.S. Hicks, E. Emsellem, P. Erwin, L. Burtscher, G. Dumas, M. Lin, M.A. Malkan, F. Müller-Sánchez, G. Orban de Xivry, D.J. Rosario, A. Schnorr-Müller and A. Tran: Fueling Active Galactic Nuclei. II. Spatially Resolved Molecular Inflows and Outflows. *Ap. J.* 792, 101 (2014).
- Davis, A.J., S. Khochfar and C. Dalla Vecchia: The First Billion Years project: dark matter haloes going from contraction to expansion and back again. *Mon. Not. R. Astron. Soc.* 443, 985-1001 (2014).
- Davis, T.A., L.M. Young, A.F. Crocker, ..., S. Khochfar, ..., R. Morganti, et al.: The ATLAS^{3D} Project - XXVIII. Dynamically driven star formation suppression in early-type galaxies. *Mon. Not. R. Astron. Soc.* 444, 3427-3445 (2014).
- Davison, C.L., R.J. White, W.-C. Jao, T.J. Henry, J.I. Bailey, S.N. Quinn, J.R. Cantrell, A.R. Riedel, J.P. Subasavage, J.G. Winters and C.J. Crockett: The Closest M-dwarf Quadruple System to the Sun. *Astron. J.* 147, 26 (2014).
- De Breuck, C., R.J. Williams, M. Swinbank, P. Caselli, K. Coppin, T.A. Davis, R. Maiolino, T. Nagao, I. Smail, F. Walter, A. Weißand M.A. Zwaan: ALMA resolves turbulent, rotating [CII] emission in a young starburst galaxy at $z = 4.8$. *Astron. Astrophys.* 565, A59 (2014).
- Degenaar, N., R. Wijnands, M.T. Reynolds, J.M. Miller, D. Altamirano, J. Kennea, N. Gehrels, D. Haggard and G. Ponti: The Peculiar Galactic Center Neutron Star X-Ray Binary XMM J174457-2850.3. *Ap. J.* 792, 109 (2014).
- De Horta, A.Y., E.R. Sommer, M.D. Filipović, A. O'Brien, L.M. Bozzetto, J.D. Collier, G.F. Wong, E.J. Crawford, N.F.H. Tothill, P. Maggi and F. Haberl: Multi-frequency Observations of a Superbubble in the LMC: The Case of LHA 120-N 70. *Astron. J.* 147, 162 (2014).
- Dekel, A. and A. Burkert: Wet disc contraction to galactic blue nuggets and quenching to red nuggets. *Mon. Not. R. Astron. Soc.* 438, 1870-1879 (2014).
- Delvecchio, I., C. Gruppioni, F. Pozzi, S. Berta, G. Zamorani, A. Cimatti, D. Lutz, D. Scott, C. Vignali, G. Cresci, A. Feltre, A. Cooray, M. Vaccari, J. Fritz, E. Le Floc'h, B. Magnelli, P. Popesso, S. Oliver, J. Bock, M. Carollo, T. Contini, O. Le Fèvre, S. Lilly, V. Mainieri, A. Renzini and M. Scodreggio: Tracing the cosmic growth of supermassive black holes to $z \sim 3$ with Herschel. *Mon. Not. R. Astron. Soc.* 439, 2736-2754 (2014).
- den Brok, M., R.F. Peletier, A. Seth, ..., P. Erwin, et al.: The HST/ACS Coma Cluster Survey - X. Nuclear star clusters in low-mass early-type galaxies: scaling relations. *Mon. Not. R. Astron. Soc.* 445, 2385-2403 (2014).
- Dexter, J. and O. Blaes: A model of the steep power-law spectra and high-frequency quasi-periodic oscillations in luminous black hole X-ray binaries. *MNRAS* 438, 3352 (2014).
- Dexter, J. and R.M. O'Leary: The Peculiar Pulsar Population of the Central Parsec. *ApJL* 783, 7 (2014).
- Dexter, J., J.C. McKinney, S. Markoff and A. Tchekhovskoy: Transient jet formation and state transitions from large-scale magnetic reconnection in black hole accretion discs. *MNRAS* 440, 2185 (2014).
- Dexter, J.; B. Kelly, G.C. Bower, D.P. Marrone, J. Stone and R. Plambeck: An 8 h characteristic time-scale in submillimetre light curves of Sagittarius A*. *MNRAS* 442, 2797 (2014).

- Diehl, R., T. Siebert, W. Hillebrandt, S.A. Grebenev, J. Greiner, M. Krause, M. Kromer, K. Maeda, F. Röpke and S. Taubenberger: Early ^{56}Ni decay gamma rays from SN2014J suggest an unusual explosion. *Science* 345, 1162-1165 (2014).
- Domínguez Sánchez, H., A. Bongiovanni, M.A. Lara-López, I. Oteo, J. Cepa, A.M. Pérez García, M. Sánchez-Portal, A. Ederoclite, D. Lutz, G. Cresci, I. Delvecchio, S. Berta, B. Magnelli, P. Popesso, F. Pozzi and L. Riguccini: Herschel far-IR counterparts of SDSS galaxies: analysis of commonly used star formation rate estimates. *Mon. Not. R. Astron. Soc.* 441, 2-23 (2014).
- Drozdovskaya, M.N., C. Walsh, R. Visser, D. Harsono and E.F. van Dishoeck: Methanol along the path from envelope to protoplanetary disc. *Mon. Not. R. Astron. Soc.* 445, 913-929 (2014).
- Du, C.-R., V. Nosenko, S. Zhdanov, H.M. Thomas and G.E. Morfill: Channeling of particles and associated anomalous transport in a two-dimensional complex plasma crystal. *Physical Review E* 89, 021101 (2014).
- Duffard, R., N. Pinilla-Alonso, P. Santos-Sanz, E. Vilenius, J.L. Ortiz, T. Müller, S. Fornasier, E. Lellouch, M. Mommert, A. Pal, C. Kiss, M. Mueller, J. Stansberry, A. Delsanti, N. Peixinho and D. Trilling: "TNOs are Cool": A survey of the trans-Neptunian region. XI. A Herschel-PACS view of 16 Centaurs. *Astron. Astrophys.* 564, A92 (2014).
- Efstathiou, A., C. Pearson, D. Farrah, D. Rigopoulou, J. Graciá-Carpio, A. Verma, H.W.W. Spoon, J. Afonso, J. Bernard-Salas, D.L. Clements, A. Cooray, D. Cormier, M. Etxaluze, J. Fischer, E. González-Alfonso, P. Hurley, V. Lebouteiller, S.J. Oliver, M. Rowan-Robinson and E. Sturm: Herschel observations and a model for IRAS 08572+3915: a candidate for the most luminous infrared galaxy in the local ($z < 0.2$) Universe. *Mon. Not. R. Astron. Soc.* 437, L16-L20 (2014).
- Elliott, J., H.-F. Yu, S. Schmidl, J. Greiner, D. Gruber, S. Oates, S. Kobayashi, B. Zhang, J.R. Cummings, R. Filgas, N. Gehrels, D. Grupe, D.A. Kann, S. Klose, T. Krühler, A. Nicuesa Guelbenzu, A. Rau, A. Rossi, M. Siegel, P. Schady, V. Sudilovsky, M. Tanga and K. Varela: Prompt emission of GRB 121217A from gamma-rays to the near-infrared. *Astron. Astrophys.* 562, A100 (2014).
- Erfanianfar, G., P. Popesso, A. Finoguenov, S. Wuyts, D. Wilman, A. Biviano, F. Ziparo, M. Salvato, K. Nandra, D. Lutz, D. Elbaz, M. Dickinson, M. Tanaka, M. Mirkazemi, M.L. Balogh, M.B. Altieri, H. Aussel, F. Bauer, S. Berta, R.M. Bielby, N. Brandt, N. Cappelluti, A. Cimatti, M. Cooper, D. Fadda, O. Ilbert, E. Le Floch, B. Magnelli, J.S. Mulchaey, R. Nordon, J.A. Newman, A. Poglitsch and F. Pozzi: The evolution of star formation activity in galaxy groups. *Mon. Not. R. Astron. Soc.* 445, 2725-2745 (2014).
- Ertel, S., O. Absil, D. Defrère, J.-B. Le Bouquin, J.-C. Augereau, L. Marion, N. Blind, A. Bonsor, G. Bryden, J. Lebreton and J. Milli: A near-infrared interferometric survey of debris-disk stars. IV. An unbiased sample of 92 southern stars observed in H band with VLTI/PIONIER. *Astron. Astrophys.* 570, A128 (2014).
- Fabiani, S., E. Costa, E. Del Monte, ..., V. Burwitz, W. Burkert, B. Menz and G. Hartner: The Imaging Properties of the Gas Pixel Detector as a Focal Plane Polarimeter. *Ap. J. Supp. Ser.* 212, 25 (2014).
- Fabricius, M.H., E. Noyola, S. Rukdee, R.P. Saglia, R. Bender, U. Hopp, J. Thomas, M. Opitsch and M.J. Williams: Central Rotations of Milky Way Globular Clusters. *Ap. J. Lett.* 787, L26 (2014).
- Fabricius, M.H., L. Coccatto, R. Bender, N. Drory, C. Gössl, M. Landriau, R.P. Saglia, J. Thomas and M.J. Williams: Regrowth of stellar discs in mature galaxies: the two-component nature of NGC 7217 revisited with VIRUS-W. *Mon. Not. R. Astron. Soc.* 441, 2212-2229 (2014).
- Fang, M., A. Sicilia-Aguilar, V. Roccatagliata, D. Fedele, T. Henning, C. Eiroa and A.

- Müller: GW Orionis: Inner disk readjustments in a triple system. *Astron. Astrophys.* 570, A118 (2014).
- Fassbender, R., A. Nastasi, J.S. Santos, C. Lidman, M. Verdugo, Y. Koyama, P. Rosati, D. Pierini, N. Padilla, A.D. Romeo, N. Menci, A. Bongiorno, M. Castellano, P. Cerulo, A. Fontana, A. Galametz, A. Grazian, A. Lamastra, L. Pentericci, V. Sommariva, V. Strazzullo, R. Šuhada and P. Tozzi: Galaxy population properties of the massive X-ray luminous galaxy cluster XDCP J0044.0-2033 at $z = 1.58$. Red-sequence formation, massive galaxy assembly, and central star formation activity. *Astron. Astrophys.* 568, A5 (2014).
- Feruglio, C., A. Bongiorno, F. Fiore, M. Krips, M. Brusa, E. Daddi, I. Gavignaud, R. Maiolino, E. Piconcelli, M. Sargent, C. Vignali and L. Zappacosta: Gas reservoir of a hyper-luminous quasar at $z = 2.6$. *Astron. Astrophys.* 565, A91 (2014).
- Fisher, D.B., K. Glazebrook, A. Bolatto, D. Obreschkow, E. Mentuch Cooper, E. Wisnioski, R. Bassett, R.G. Abraham, I. Damjanov, A. Green and P. McGregor: Extreme Gas Fractions in Clumpy, Turbulent Disk Galaxies at $z \sim 0.1$. *Ap. J. Lett.* 790, L30 (2014).
- Fitzpatrick, G., E. Cramer, S. McBreen, M.S. Briggs, S. Foley, D. Tierney, V.L. Chaplin, V. Connaughton, M. Stanbro, S. Xiong, J. Dwyer, G.J. Fishman, O.J. Roberts and A. von Kienlin: Compton scattering in terrestrial gamma-ray flashes detected with the Fermi gamma-ray burst monitor. *Physical Review D* 90, 043008 (2014).
- Folatelli, G., M.C. Bersten, H. Kuncarayakti, F. Olivares Estay, ..., P. Afonso, K. Altenmüller, J. Elliott, J. Greiner, et al.: Supernova 2010as: The Lowest-velocity Member of a Family of Flat-velocity Type IIb Supernovae. *Ap. J.* 792, 7 (2014).
- Foley, S., G. Fitzpatrick, M.S. Briggs, V. Connaughton, D. Tierney, S. McBreen, J.R. Dwyer, V.L. Chaplin, P.N. Bhat, D. Bhat, E. Cramer, G.J. Fishman, S. Xiong, J. Greiner, R.M. Kippen, C.A. Meegan, W.S. Paciesas, R.D. Preece, A. Kienlin, C. Wilson-Hodge: Pulse properties of terrestrial gamma-ray flashes detected by the Fermi Gamma-Ray Burst Monitor. *J. Geophys. Res. (Space Physics)*, 119, Issue 7 5931-5942 (2014).
- Fontana, A., J.S. Dunlop, D. Paris, ..., A. Galametz, ..., S. Wuyts, ..., D. Rosario, et al.: The Hawk-I UDS and GOODS Survey (HUGS): survey design and deep K-band number counts. *Astron. Astrophys.* 570, 11-23 (2014).
- Forbes, J.C., M.R. Krumholz, A. Burkert and A. Dekel: Balance among gravitational instability, star formation and accretion determines the structure and evolution of disc galaxies. *Mon. Not. R. Astron. Soc.* 438, 1552-1576 (2014).
- Forbes, J.C., M.R. Krumholz, A. Burkert and A. Dekel: On the origin of the fundamental metallicity relation and the scatter in galaxy scaling relations. *Mon. Not. R. Astron. Soc.* 443, 168-185 (2014).
- Friesen, R.K., J. Di Francesco, T.L. Bourke, P. Caselli, J.K. Jørgensen, J.E. Pineda and M. Wong: Revealing H_2D^+ Depletion and Compact Structure in Starless and Protostellar Cores with ALMA. *Ap. J.* 797, 27 (2014).
- Fritz, A., M. Scodreggio, O. Ilbert, ..., S. Phleps, et al.: The VIMOS Public Extragalactic Redshift Survey (VIPERS): A quiescent formation of massive red-sequence galaxies over the past 9 Gyr. *Astron. Astrophys.* 563, A92 (2014).
- Fuente, A., J. Cernicharo, P. Caselli, C. McCoey, D. Johnstone, M. Fich, T. van Kempen, A. Palau, U.A. Yildiz, B. Tercero and A. López: The hot core towards the intermediate-mass protostar NGC 7129 FIRS 2. Chemical similarities with Orion KL. *Astron. Astrophys.* 568, A65 (2014).
- Fumagalli, M., I. Labbé, S.G. Patel, ..., N.M. Förster Schreiber, et al.: How Dead are Dead Galaxies? Mid-infrared Fluxes of Quiescent Galaxies at Redshift $0.3 < z < 2.5$: Implications for Star Formation Rates and Dust Heating. *Ap. J.* 796 (2014).

- Fynbo, J.P.U., T. Krühler, K. Leighly, ..., J. Greiner, ..., F. Knust, ..., P. Schady, et al.: The mysterious optical afterglow spectrum of GRB 140506A at $z = 0.889$. *Astron. Astrophys.* 572, A12 (2014).
- Förster Schreiber, N.M., R. Genzel, S.F. Newman, J.D. Kurk, D. Lutz, L.J. Tacconi, S. Wuyts, K. Bandara, A. Burkert, P. Buschkamp, C.M. Carollo, G. Cresci, E. Daddi, R. Davies, F. Eisenhauer, E.K.S. Hicks, P. Lang, S.J. Lilly, V. Mainieri, C. Mancini, T. Naab, Y. Peng, A. Renzini, D. Rosario, K. Shapiro Griffin, A.E. Shapley, A. Sternberg, S. Tacchella, D. Vergani, E. Wisnioski, E. Wuyts and G. Zamorani: The SINS/zC-SINF Survey of $z \sim 2$ Galaxy Kinematics: Evidence for Powerful Active Galactic Nucleus-Driven Nuclear Outflows in Massive Star-Forming Galaxies. *Ap. J.* 787, 38 (2014).
- Gandhi, P., G.B. Lansbury, D.M. Alexander, ..., M. Brightman, et al.: NuSTAR Unveils a Compton-thick Type 2 Quasar in Mrk 34. *Ap. J.* 792, 117 (2014).
- García-Burillo, S., F. Combes, A. Usero, ..., L.J. Tacconi, et al.: Molecular line emission in NGC 1068 imaged with ALMA. I. An AGN-driven outflow in the dense molecular gas. *Astron. Astrophys.* 567, A125 (2014).
- Garilli, B., L. Guzzo, M. Scodreggio, ..., S. Phleps, et al.: The VIMOS Public Extragalactic Survey (VIPERS). First Data Release of 57 204 spectroscopic measurements. *Astron. Astrophys.* 562, A23 (2014).
- Garufi, A., L. Podio, I. Kamp, F. Ménard, S. Brittain, C. Eiroa, B. Montesinos, M. Alonso-Martínez, W.F. Thi and P. Woitke: The protoplanetary disk of FT Tauri: multiwavelength data analysis and modeling. *Astron. Astrophys.* 567, A141 (2014).
- Genzel, R., N.M. Förster Schreiber, D. Rosario, P. Lang, D. Lutz, E. Wisnioski, E. Wuyts, S. Wuyts, K. Bandara, R. Bender, S. Berta, J. Kurk, J.T. Mendel, L.J. Tacconi, D. Wilman, A. Beifiori, G. Brammer, A. Burkert, P. Buschkamp, J. Chan, C.M. Carollo, R. Davies, F. Eisenhauer, M. Fabricius, M. Fossati, M. Kriek, S. Kulkarni, S.J. Lilly, C. Mancini, I. Momcheva, T. Naab, E.J. Nelson, A. Renzini, R. Saglia, R.M. Sharples, A. Sternberg, S. Tacchella and P. van Dokkum: Evidence for Wide-spread Active Galactic Nucleus-driven Outflows in the Most Massive $z \sim 1-2$ Star-forming Galaxies. *Ap. J.* 796, 7 (2014).
- Genzel, R., N.M. Förster Schreiber, P. Lang, S. Tacchella, L.J. Tacconi, S. Wuyts, K. Bandara, A. Burkert, P. Buschkamp, C.M. Carollo, G. Cresci, R. Davies, F. Eisenhauer, E.K.S. Hicks, J. Kurk, S.J. Lilly, D. Lutz, C. Mancini, T. Naab, S. Newman, Y. Peng, A. Renzini, K. Shapiro Griffin, A. Sternberg, D. Vergani, E. Wisnioski, E. Wuyts and G. Zamorani: The SINS/zC-SINF Survey of $z \sim 2$ Galaxy Kinematics: Evidence for Gravitational Quenching. *Ap. J.* 785, 75 (2014).
- Georgakakis, A., G. Mountrichas, M. Salvato, D. Rosario, P.G. Pérez-González, D. Lutz, K. Nandra, A. Coil, M.C. Cooper, J.A. Newman, S. Berta, B. Magnelli, P. Popesso and F. Pozzi: Large-scale clustering measurements with photometric redshifts: comparing the dark matter haloes of X-ray AGN, star-forming and passive galaxies at $z \sim 1$. *Mon. Not. R. Astron. Soc.* 443, 3327-3340 (2014).
- Georgakakis, A., P.G. Pérez-González, N. Fanidakis, M. Salvato, J. Aird, H. Messias, J.M. Lotz, G. Barro, L.-T. Hsu, K. Nandra, D. Rosario, M.C. Cooper, D.D. Kocevski and J.A. Newman: Investigating evidence for different black hole accretion modes since redshift $z \sim 1$. *Mon. Not. R. Astron. Soc.* 440, 339-352 (2014).
- Giannantonio, T., A.J. Ross, W.J. Percival, R. Crittenden, D. Bacher, M. Kilbinger, R. Nichol and J. Weller: Improved primordial non-Gaussianity constraints from measurements of galaxy clustering and the integrated Sachs-Wolfe effect. *Physical Review D* 89, 023511 (2014).
- Gilli, R., C. Norman, C. Vignali, ..., M. Brusa, et al.: ALMA reveals a warm and compact starburst around a heavily obscured supermassive black hole at $z = 4.75$. *Astron. Astrophys.* 562, A67 (2014).

- González-Alfonso, E., J. Fischer, J. Graciá-Carpio, N. Falstad, E. Sturm, M. Meléndez, H.W.W. Spoon, A. Verma, R.I. Davies, D. Lutz, S. Aalto, E. Polinsky, A. Poglitsch, S. Veilleux and A. Contursi: The Mrk 231 molecular outflow as seen in OH. *Astron. Astrophys.* 561, A27 (2014).
- Goodman, A.A., J. Alves, C.N. Beaumont, R.A. Benjamin, M.A. Borkin, A. Burkert, T.M. Dame, J. Jackson, J. Kauffmann, T. Robitaille and R.J. Smith: The Bones of the Milky Way. *Ap. J.* 797, 53 (2014).
- Gozaliasl, G., A. Finoguenov, H.G. Khosroshahi, M. Mirkazemi, M. Salvato, D.M.Z. Jassur, G. Erfanianfar, P. Popesso, M. Tanaka, M. Lerchster, J.P. Kneib, H.J. McCracken, Y. Mellier, E. Egami, M.J. Pereira, F. Brimiouille, T. Erben and S. Seitz: Mining the gap: evolution of the magnitude gap in X-ray galaxy groups from the 3-square-degree XMM coverage of CFHTLS. *Astron. Astrophys.* 566, A140 (2014).
- Graninger, D.M., E. Herbst, K.I. Öberg and A.I. Vasyunin: The HNC/HCN Ratio in Star-forming Regions. *Ap. J.* 787, 74 (2014).
- Green, A. W., K. Glazebrook, P. J. McGregor, I. Damjanov, E. Wisnioski, R.G. Abraham, M. Colless, R.G. Sharp, R. A. Crain, G. B. Poole, P. J. McCarthy: DYNAMO - I. A sample of H α -luminous galaxies with resolved kinematics. *Mon. Not. R. Astron. Soc.* 437, 1070-1095 (2014).
- Greiner, J., H.-F. Yu, T. Krühler, D.D. Frederiks, A. Beloborodov, P.N. Bhat, J. Bolmer, H. van Eerten, R.L. Apteekar, J. Elliott, S.V. Golenetskii, J.F. Graham, K. Hurley, D.A. Kann, S. Klose, A. Nicuesa Guelbenzu, A. Rau, P. Schady, S. Schmidl, V. Sudilovsky, D.S. Svinikin, M. Tanga, M.V. Ulanov, K. Varela, A. von Kienlin and X.-L. Zhang: GROND coverage of the main peak of gamma-ray burst 130925A. *Astron. Astrophys.* 568, A75 (2014).
- Gritschneider, M. and A. Burkert: The return of the proplyds - understanding the dynamics of ionization triggered stars. *Mon. Not. R. Astron. Soc.* 438, 1318-1323 (2014).
- Gruber, D., A. Goldstein, V. Weller von Ahlefeld, ..., R. Diehl, ..., J. Greiner, ..., A. von Kienlin, ..., A. Rau, et al.: The Fermi GBM Gamma-Ray Burst Spectral Catalog: Four Years of Data. *Ap. J. Supp. Ser.* 211, 12 (2014).
- Gruen, D., S. Seitz, F. Brimiouille, R. Kosyra, J. Koppenhoefer, C.-H. Lee, R. Bender, A. Riffeser, T. Eichner, T. Weidinger and M. Bierschenk: Weak lensing analysis of SZ-selected clusters of galaxies from the SPT and Planck surveys. *Mon. Not. R. Astron. Soc.* 442, 1507-1544 (2014).
- Guidorzi, C., C.G. Mundell, R. Harrison, ..., J. Greiner, ..., A. Rau, et al.: New constraints on gamma-ray burst jet geometry and relativistic shock physics. *Mon. Not. R. Astron. Soc.* 438, 752-767 (2014).
- Guo, Z., E. Möbius, B. Klecker, P. Bochler, J.J. Connell, Y.Y. Kartavykh, G.M. Mason and M.A. Popecki: Observation of High Iron Charge States at Low Energies in Solar Energetic Particle Events. *Ap. J.* 785, 26 (2014).
- Guzzo, L., M. Scodreggio, B. Garilli, ..., S. Phleps, et al.: The VIMOS Public Extragalactic Redshift Survey (VIPERS). An unprecedented view of galaxies and large-scale structure at $0.5 < z < 1.2$. *Astron. Astrophys.* 566, A108 (2014).
- Gültekin, K., K. Gebhardt, J. Kormendy, T.R. Lauer, R. Bender, S. Tremaine and D.O. Richstone: The Black Hole Mass and the Stellar Ring in NGC 3706. *Ap. J.* 781, 112 (2014).
- Haerendel, G. and H.U. Frey: Role and origin of the poleward Alfvénic arc. *J. Geophys. Res. (Space Phys.)* 119, 2945-2962 (2014).
- Haerendel, G.: M-I coupling scales and energy dumping. *Geophys. Res. Lett.* 41, 1846-1853 (2014).

- Haerendel, G.: Substorms: Plasma and magnetic flux transport from the magnetic tail into the magnetosphere, Chapter 18 in „Magnetotails in the Solar System“ (Eds.) A. Keiling, C. Jackman, and P. Delamere, John Wiley & Sons, Inc., Hoboken, NJ, 307-326 (2014).
- Hamrin, M., T. Pitkänen, P. Norqvist, T. Karlsson, H. Nilsson, M. André, S. Buchert, A. Vaivads, O. Marghitu, B. Klecker, L.M. Kistler and I. Dandouras: Evidence for the braking of flow bursts as they propagate toward the Earth. *J. Geophys. Res. (Space Phys.)* 119, 9004-9018 (2014).
- Hanabata, Y., H. Katagiri, J.W. Hewitt, J. Ballet, Y. Fukazawa, Y. Fukui, T. Hayakawa, M. Lemoine-Goumard, G. Pedretti, A.W. Strong, D.F. Torres and R. Yamazaki: Detailed Investigation of the Gamma-Ray Emission in the Vicinity of SNR W28 with FERMI-LAT. *Ap. J.* 786, 145 (2014).
- Hao, H., M. Elvis, F. Civano, G. Zamorani, L.C. Ho, A. Comastri, M. Brusa, A. Bongiorno, A. Merloni, J.R. Trump, M. Salvato, C.D. Impey, A.M. Koekemoer, G. Lanzuisi, A. Celotti, K. Jahnke, C. Vignali, J.D. Silverman, C.M. Urry, K. Schawinski and P. Capak: Spectral energy distributions of type 1 AGN in XMM-COSMOS - II. Shape evolution. *Mon. Not. R. Astron. Soc.* 438, 1288-1304 (2014).
- Hardcastle, M.J. and M.G.H. Krause: Numerical modelling of the lobes of radio galaxies in cluster environments - II. Magnetic field configuration and observability. *Mon. Not. R. Astron. Soc.* 443, 1482-1499 (2014).
- Harsono, D., J.K. Jørgensen, E.F. van Dishoeck, M.R. Hogerheijde, S. Bruderer, M.V. Persson and J.C. Mottram: Rotationally-supported disks around Class I sources in Taurus: disk formation constraints. *Astron. Astrophys.* 562, A77 (2014).
- Hashimoto, Y., J.P. Henry and H. Böhringer: Multiwavelength investigations of co-evolution of bright cluster galaxies and their host clusters. *Mon. Not. R. Astron. Soc.* 440, 588-600 (2014).
- Hatch, N.A., D. Wylezalek, J.D. Kurk, D. Stern, C. de Breuck, M.J. Jarvis, A. Galametz, A.H. Gonzalez, W.G. Hartley, A. Mortlock, N. Seymour and J.A. Stevens: Why $z > 1$ radio-loud galaxies are commonly located in protoclusters. *Mon. Not. R. Astron. Soc.* 445, 280-289 (2014).
- Hayward, C.C., L. Lanz, M.L.N. Ashby, G. Fazio, L. Hernquist, J.R. Martínez-Galarza, K. Noeske, H.A. Smith, S. Wuyts and A. Zezas: The total infrared luminosity may significantly overestimate the star formation rate of quenching and recently quenched galaxies. *Mon. Not. R. Astron. Soc.* 445, 1598-1604 (2014).
- Heays, A.N., R. Visser, R. Gredel, W. Ubachs, B.R. Lewis, S.T. Gibson and E.F. van Dishoeck: Isotope selective photodissociation of N_2 by the interstellar radiation field and cosmic rays. *Astron. Astrophys.* 562, A61 (2014).
- Hein Bertelsen, R.P., I. Kamp, M. Goto, G. van der Plas, W.-F. Thi, L.B.F.M. Waters, M.E. van den Ancker and P. Woitke: CO ro-vibrational lines in HD 100546. A search for disc asymmetries and the role of fluorescence. *Astron. Astrophys.* 561, A102 (2014).
- Henry, J.P., K. Aoki, A. Finoguenov, S. Fotopoulou, G. Hasinger, M. Salvato, H. Suh and M. Tanaka: A Large-scale Structure at Redshift 1.71 in the Lockman Hole. *Ap. J.* 780, 58 (2014).
- Henshaw, J.D., P. Caselli, F. Fontani, I. Jiménez-Serra and J.C. Tan: The dynamical properties of dense filaments in the infrared dark cloud G035.39-00.33. *Mon. Not. R. Astron. Soc.* 440, 2860-2881 (2014).
- Henze, M., W. Pietsch, F. Haberl, M. Della Valle, G. Sala, D. Hatzidimitriou, F. Hofmann, M. Hernanz, D.H. Hartmann and J. Greiner: X-ray monitoring of classical novae in the central region of M 31 III. Autumn and winter 2009/10, 2010/11, and 2011/12. *Astron. Astrophys.* 563, A2 (2014).

- Hirschmann, M., G. de Lucia, D. Wilman, S. Weinmann, A. Iovino, O. Cucciati, S. Zibetti and Á. Villalobos: The influence of the environmental history on quenching star formation in a Λ cold dark matter universe. *Mon. Not. R. Astron. Soc.* 444, 2938-2959 (2014).
- Hirschmann, M., K. Dolag, A. Saro, L. Bachmann, S. Borgani and A. Burkert: Cosmological simulations of black hole growth: AGN luminosities and downsizing. *Mon. Not. R. Astron. Soc.* 442, 2304-2324 (2014).
- Hopp, U. and J. Vennik: Studying the dwarf galaxies in nearby groups of galaxies: Spectroscopic and photometric data. *Astron. Nachr.* 335, 992 (2014).
- Hou, Z., C.L. Reichardt, K.T. Story, ..., J.J. Mohr, et al.: Constraints on Cosmology from the Cosmic Microwave Background Power Spectrum of the 2500 deg² SPT-SZ Survey. *Ap. J.* 782, 74 (2014).
- Hsu, L.-T., M. Salvato, K. Nandra, M. Brusa, R. Bender, J. Buchner, J.L. Donley, D.D. Kocevski, Y. Guo, N.P. Hathi, C. Rangel, S.P. Willner, M. Brightman, A. Georgakakis, T. Budavári, A.S. Szalay, M.L.N. Ashby, G. Barro, T. Dahlen, S.M. Faber, H.C. Ferguson, A. Galametz, A. Grazian, N.A. Grogin, K.-H. Huang, A.M. Koekemoer, R.A. Lucas, E. McGrath, B. Mobasher, M. Peth, D.J. Rosario and J.R. Trump: CANDELS/GOODS-S, CDFS, and ECDFS: Photometric Redshifts for Normal and X-Ray-Detected Galaxies. *Ap. J.* 796, 60 (2014).
- Hunt, L.K., E. Palazzi, M.J. Michalowski, A. Rossi, S. Savaglio, S. Basa, S. Berta, S. Bianchi, S. Covino, V. D'Elia, P. Ferrero, D. Götz, J. Greiner, S. Klose, D. Le Borgne, E. Le Floch, E. Pian, S. Piranomonte, P. Schady and S.D. Vergani: New light on gamma-ray burst host galaxies with Herschel. *Astron. Astrophys.* 565, A112 (2014).
- Hunt, L.K., L. Testi, V. Casasola, S. García-Burillo, F. Combes, R. Nikutta, P. Caselli, C. Henkel, R. Maiolino, K.M. Menten, M. Sauvage and A. Weiss: ALMA observations of cool dust in a low-metallicity starburst, SBS 0335-052. *Astron. Astrophys.* 561, A49 (2014).
- Huppenkothen, D., C. D'Angelo, A.L. Watts, L. Heil, M. van der Klis, A.J. van der Horst, C. Kouveliotou, M.G. Baring, E. Göğüş, J. Granot, Y. Kaneko, L. Lin, A. von Kienlin and G. Younes: Quasi-periodic Oscillations in Short Recurring Bursts of the Soft Gamma Repeater J1550-5418. *Ap. J.* 787, 128 (2014).
- Ishiguro, M., D. Kuroda, S. Hasegawa, ..., A. Rau, J. Greiner, P. Schady, F. Knust, F. Usui and T.G. Müller: Optical Properties of (162173) 1999 JU3: In Preparation for the JAXA Hayabusa 2 Sample Return Mission. *Ap. J.* 792, 74 (2014).
- Ivlev, A.V., S.K. Zhdanov, M. Lampe and G.E. Morfill: Mode-Coupling Instability in a Fluid Two-Dimensional Complex Plasma. *Phys. Rev. Lett.* 113, 135002 (2014).
- Jeon, J., T.G. Klaempfl, J.L. Zimmermann, G.E. Morfill and T. Shimizu: Sporicidal properties from surface micro-discharge plasma under different plasma conditions at different humidities. *New J. Phys.* 16, 103007 (2014).
- Jian, L.K., H.Y. Wei, C.T. Russell, J.G. Luhmann, B. Klecker, N. Omid, P.A. Isenberg, M.L. Goldstein, A. Figueroa-Viñas and X. Blanco-Cano: Electromagnetic Waves near the Proton Cyclotron Frequency: STEREO Observations. *Ap. J.* 786, 123 (2014).
- Jiménez-Serra, I., L. Testi, P. Caselli and S. Viti: Detectability of Glycine in Solar-type System Precursors. *Ap. J. Lett.* 787, L33 (2014).
- Jiménez-Serra, I., P. Caselli, F. Fontani, J.C. Tan, J.D. Henshaw, J. Kainulainen and A.K. Hernandez: Gas kinematics and excitation in the filamentary IRDC G035.39-00.33. *Mon. Not. R. Astron. Soc.* 439, 1996-2013 (2014).
- Johnson, J.L., D.J. Whalen, B. Agarwal, J.-P. Paardekooper and S. Khochfar: The impact of reionization on the formation of supermassive black hole seeds. *Mon. Not. R. Astron. Soc.* 445, 686-693 (2014).

- Kaastra, J.S., G.A. Kriss, M. Cappi, ..., G. Ponti et al.: A fast and long-lived outflow from the supermassive black hole in NGC 5548. *Science* 345, 64-68 (2014).
- Kaastra, J.S., J. Ebrero, N. Arav, E. Behar, S. Bianchi, G. Branduardi-Raymont, M. Cappi, E. Costantini, G.A. Kriss, B. de Marco, M. Mehdipour, S. Paltani, P.-O. Petrucci, C. Pinto, G. Ponti, K.C. Steenbrugge and C.P. de Vries: Multiwavelength campaign on Mrk 509. XIV. Chandra HETGS spectra. *Astron. Astrophys.* 570, A73 (2014).
- Kalemci, E., M.Ö. Arabacı, T. Güver, D.M. Russell, J.A. Tomsick, J. Wilms, G. Weidenpointner, E. Kuulkers, M. Falanga, T. Dinçer, S. Drave, T. Belloni, M. Coriat, F. Lewis and T. Muñoz-Darias: Multiwavelength observations of the black hole transient Swift J1745-26 during the outburst decay. *Mon. Not. R. Astron. Soc.* 445, 1288-1298 (2014).
- Karska, A., F. Herpin, S. Bruderer, J.R. Goicoechea, G.J. Herczeg, E.F. van Dishoeck, I. San José-García, A. Contursi, H. Feuchtgruber, D. Fedele, A. Baudry, J. Braine, L. Chavarría, J. Cernicharo, F.F.S. van der Tak and F. Wyrowski: Far-infrared molecular lines from low- to high-mass star forming regions observed with Herschel. *Astron. Astrophys.* 562, A45 (2014).
- Karska, A., L.E. Kristensen, E.F. van Dishoeck, M.N. Drozdovskaya, J.C. Mottram, G.J. Herczeg, S. Bruderer, S. Cabrit, N.J. Evans, D. Fedele, A. Gusdorf, J.K. Jørgensen, M.J. Kaufman, G.J. Melnick, D.A. Neufeld, B. Nisini, G. Santangelo, M. Tafalla and S.F. Wampfler: Shockingly low water abundances in Herschel/PACS observations of low-mass protostars in Perseus. *Astron. Astrophys.* 572, A9 (2014).
- Kazin, E.A., J. Koda, C. Blake, ..., E. Wisnioski, et al.: The WiggleZ Dark Energy Survey: improved distance measurements to $z = 1$ with reconstruction of the baryonic acoustic feature. *Mon. Not. R. Astron. Soc.* 441, 3524-3542 (2014).
- Keane, J.T., I. Pascucci, C. Espaillat, P. Woitke, S. Andrews, I. Kamp, W.-F. Thi, G. Meeus and W.R.F. Dent: Herschel Evidence for Disk Flattening or Gas Depletion in Transitional Disks. *Ap. J.* 787, 153 (2014).
- Keto, E. and A. Burkert: From filaments to oscillating starless cores. *Mon. Not. R. Astron. Soc.* 441, 1468-1473 (2014).
- Keto, E., J. Rawlings and P. Caselli: Chemistry and radiative transfer of water in cold, dense clouds. *Mon. Not. R. Astron. Soc.* 440, 2616-2624 (2014).
- Khrapak, S.A., A.G. Khrapak, A.V. Ivlev and G.E. Morfill: Simple estimation of thermodynamic properties of Yukawa systems. *Physical Review E* 89, 023102 (2014).
- Khrapak, S.A., A.G. Khrapak, A.V. Ivlev and H.M. Thomas: Ion sphere model for Yukawa systems (dusty plasmas). *Phys. Plasmas* 21, 123705 (2014).
- Khrapak, S.A.: Accurate transport cross sections for the Lennard-Jones potential. *European Physical Journal D* 68, 276 (2014).
- Kiss, C., T.G. Müller, E. Vilenius, A. Pál, P. Santos-Sanz, E. Lellouch, G. Marton, E. Verebelyi, N. Szalai, P. Hartogh, J. Stansberry, F. Henry and A. Delsanti: Optimized Herschel/PACS photometer observing and data reduction strategies for moving solar system targets. *Experimental Astronomy* 37, 161-174 (2014).
- Klaas, U., K. Okumura, M. Ferlet, T. Müller, M. Sanchez-Portal, B. Altieri, D. Doyle and G.L. Pilbratt: Herschel out-of-field stray-light characterization. *Experimental Astronomy* 37, 331-345 (2014).
- Koch, E.W., A. Bahramian, C.O. Heinke, K. Mori, N. Rea, N. Degenaar, D. Haggard, R. Wijnands, G. Ponti, J.M. Miller, F. Yusef-Zadeh, F. Dufour, W.D. Cotton, F.K. Baganoff and M.T. Reynolds: The 2013 outburst of a transient very faint X-ray binary, 23 arcsec from Sgr A*. *Mon. Not. R. Astron. Soc.* 442, 372-381 (2014).
- Kompaneets, R., A. V. Ivlev and G. E. Morfill: Stopping power: Effect of the projectile

- deceleration. *Phys. Plasmas* 21, 113108, (2014).
- Kompaneets, R., A.V. Ivlev, V. Nosenko and G.E. Morfill: Wakes in inhomogeneous plasmas. *Physical Review E* 89, 043108 (2014).
- Koulouridis, E., M. Plionis, O. Melnyk, A. Elyiv, I. Georgantopoulos, N. Clerc, J. Surdej, L. Chiappetti and M. Pierre: X-ray AGN in the XMM-LSS galaxy clusters: no evidence of AGN suppression. *Astron. Astrophys.* 567, A83 (2014).
- Krauß, F., M. Kadler, K. Mannheim, ..., C. Großberger, et al.: TANAMI blazars in the IceCube PeV-neutrino fields. *Astron. Astrophys. Lett.* 556, L7, (2014).
- Krause, M., R. Diehl, H. Böhringer, M. Freyberg and D. Lubos: Feedback by massive stars and the emergence of superbubbles. II. X-ray properties. *Astron. Astrophys.* 566, A94 (2014).
- Krause, M.G.H. and R. Diehl: Dynamics and Energy Loss in Superbubbles. *Ap. J. Lett.* 794, L21 (2014).
- Kylafis, N.D., J.E. Trümper and Ü. Ertan: Spectral formation in a radiative shock: application to anomalous X-ray pulsars and soft gamma-ray repeaters. *Astron. Astrophys.* 562, A62 (2014).
- Küpper, J., S. Stern, L. Holmegaard, ..., G. Weidenspointner, et al.: X-Ray Diffraction from Isolated and Strongly Aligned Gas-Phase Molecules with a Free-Electron Laser. *Phys. Rev. Lett.* 112, 083002 (2014).
- Küppers, M., L. O'Rourke, D. Bockelée-Morvan, V. Zakharov, S. Lee, P. von Allmen, B. Carry, D. Teyssier, A. Marston, T. Müller, J. Crovisier, M.A. Barucci and R. Moreno: Localized sources of water vapour on the dwarf planet (1)Ceres. *Nature* 505, 525-527 (2014).
- La Franca, F., S. Bianchi, G. Ponti, E. Branchini and G. Matt: A New Cosmological Distance Measure Using Active Galactic Nucleus X-Ray Variability. *Ap. J. Lett.* 787, L12 (2014).
- Lacerda, P., S. Fornasier, E. Lellouch, C. Kiss, E. Vilenius, P. Santos-Sanz, M. Rengel, T. Müller, J. Stansberry, R. Duffard, A. Delsanti and A. Guilbert-Lepoutre: The Albedo-Color Diversity of Transneptunian Objects. *Ap. J. Lett.* 793, L2 (2014).
- Lackner, C.N., J.D. Silverman, M. Salvato, P. Kampczyk, J.S. Kartaltepe, D. Sanders, P. Capak, F. Civano, C. Halliday, O. Ilbert, K. Jahnke, A.M. Koekemoer, N. Lee, O. Le Fèvre, C.T. Liu, N. Scoville, K. Sheth and S. Toft: Late-Stage Galaxy Mergers in Cosmos to $z \sim 1$. *Astron. J.* 148, 137 (2014).
- Lacour, S., F. Eisenhauer, S. Gillessen, O. Pfuhl, J. Willez, H. Bonnet, G. Perrin, B. Lazareff, S. Rabien, V. Lapeyrère, Y. Clénet, P. Kervella and Y. Kok: Reaching micro-arcsecond astrometry with long baseline optical interferometry. Application to the GRAVITY instrument. *Astron. Astrophys.* 567, A75 (2014).
- Lang, P., S. Wuyts, R.S. Somerville, N.M. Förster Schreiber, R. Genzel, E.F. Bell, G. Brammer, A. Dekel, S.M. Faber, H.C. Ferguson, N.A. Grogin, D.D. Kocevski, A.M. Koekemoer, D. Lutz, E.J. McGrath, I. Momcheva, E.J. Nelson, J.R. Primack, D.J. Rosario, R.E. Skelton, L.J. Tacconi, P.G. van Dokkum and K.E. Whitaker: Bulge Growth and Quenching since $z = 2.5$ in CANDELS/3D-HST. *Ap. J.* 788, 11 (2014).
- Langer, W.D., J.L. Pineda and T. Velusamy: The scale height of gas traced by [C ii] in the Galactic plane. *Astron. Astrophys.* 564, A101 (2014).
- Langer, W.D., T. Velusamy, J.L. Pineda, K. Willacy and P.F. Goldsmith: A Herschel [C ii] Galactic plane survey. II. CO-dark H₂ in clouds. *Astron. Astrophys.* 561, A122 (2014).
- Lanzuisi, G., G. Ponti, M. Salvato, G. Hasinger, N. Cappelluti, A. Bongiorno, M. Brusa, E. Lusso, K. Nandra, A. Merloni, J. Silverman, J. Trump, C. Vignali, A. Comastri, R. Gilli, M. Schramm, C. Steinhardt, D. Sanders, J. Kartaltepe, D. Rosario and B. Trak-

- htenbrot: Active Galactic Nucleus X-Ray Variability in the XMM-COSMOS Survey. *Ap. J.* 781, 105 (2014).
- Lauf, T. and R. Andritschke: ROOT based Offline and Online Analysis (ROAn): An analysis framework for X-ray detector data. *Nucl. Instrum. Methods Phys. Res. (A)* 762, 142-148 (2014).
- Laut, I., C. R ath, L. W orner, V. Nosenko, S.K. Zhdanov, J. Schablinski, D. Block, H.M. Thomas and G.E. Morfill: Network analysis of three-dimensional complex plasma clusters in a rotating electric field. *Physical Review E* 89, 023104 (2014).
- Lee, C.-H., J. Koppenhoefer, S. Seitz, R. Bender, A. Riffeser, M. Kodric, U. Hopp, J. Snigula, C. G ossel, R.-P. Kudritzki, W. Burgett, K. Chambers, K. Hodapp, N. Kaiser and C. Waters: Properties of M31. V. 298 Eclipsing Binaries from PAndromeda. *Ap. J.* 797, 22 (2014).
- Lee, C.-H., S. Seitz, M. Kodric, A. Riffeser, J. Koppenhoefer, R. Bender, J. Snigula, U. Hopp, C. G ossel, L. Bianchi, P.A. Price, M. Fraser, W. Burgett, K.C. Chambers, P.W. Draper, H. Flewelling, N. Kaiser, R.-P. Kudritzki and E.A. Magnier: Properties of M31. IV. Candidate Luminous Blue Variables from PAndromeda. *Ap. J.* 785, 11 (2014).
- Lemaux, B.C., O. Cucciati, L.A.M. Tasca, ..., M. Salvato, et al.: VIMOS Ultra-Deep Survey (VUDS): Witnessing the assembly of a massive cluster at $z \sim 3.3$. *Astron. Astrophys.* 572, A41 (2014).
- Li, X., T.J. Millar, C. Walsh, A.N. Heays and E.F. van Dishoeck: Photodissociation and chemistry of N_2 in the circumstellar envelope of carbon-rich AGB stars. *Astron. Astrophys.* 568, A111 (2014).
- Li, Z.-Y., R. Krasnopolsky, H. Shang and B. Zhao: On the Role of Pseudodisk Warping and Reconnection in Protostellar Disk Formation in Turbulent Magnetized Cores. *Ap. J.* 793, 130 (2014).
- Liao, J., X. Cai, L.M. Kistler, C.R. Clauer, C.G. Mouikis, B. Klecker and I. Dandouras: The relationship between sawtooth events and O^+ in the plasma sheet. *J. Geophys. Res. (Space Phys.)* 119, 1572-1586 (2014).
- Lin, L., H.-Y. Jian, S. Foucaud, S. Phleps, et al.: The Pan-STARRS1 Medium-Deep Survey: The Role of Galaxy Group Environment in the Star Formation Rate versus Stellar Mass Relation and Quiescent Fraction out to $z \sim 0.8$. *Ap. J.* 782, 33 (2014).
- Lin, R.-L., J.-C. Zhang, R.C. Allen, L.M. Kistler, C.G. Mouikis, J.-C. Gong, S.-Q. Liu, L.-Q. Shi, B. Klecker, J.-A. Sauvaud and M.W. Dunlop: Testing linear theory of EMIC waves in the inner magnetosphere: Cluster observations. *J. Geophys. Res. (Space Phys.)* 119, 1004-1027 (2014).
- Liu, Y.C.-M., J. Huang, C. Wang, B. Klecker, A.B. Galvin, K.D.C. Simunac, M.A. Popecki, L. Kistler, C. Farrugia, M.A. Lee, H. Kucharek, A. Opitz, J.G. Luhmann and L. Jian: A statistical analysis of heliospheric plasma sheets, heliospheric current sheets, and sector boundaries observed in situ by STEREO. *J. Geophys. Res. (Space Phys.)* 119, 8721-8732 (2014).
- Lutz, D.: Far-Infrared Surveys of Galaxy Evolution. *Annual Review of Astronomy and Astrophysics* 52, 373-414 (2014).
- L opez-Gonzaga, N., W. Jaffe, L. Burtscher, K.R.W. Tristram and K. Meisenheimer: Revealing the large nuclear dust structures in NGC 1068 with MIDI/VLTI. *Astron. Astrophys.* 565, A71 (2014).
- Ma, C.-P., J.E. Greene, N. McConnell, R. Janish, J.P. Blakeslee, J. Thomas and J.D. Murphy: The MASSIVE Survey. I. A Volume-limited Integral-field Spectroscopic Study of the Most Massive Early-type Galaxies within 108 Mpc. *Ap. J.* 795, 158 (2014).

- Madigan, A.-M., O. Pfuhl, Y. Levin, S. Gillessen, R. Genzel and H.B. Perets: On the Origin of the B-stars in the Galactic Center. *Ap. J.* 784, 23 (2014).
- Maggi, P., F. Haberl, P.J. Kavanagh, S.D. Points, J. Dickel, L.M. Bozzetto, M. Sasaki, Y.-H. Chu, R.A. Gruendl, M.D. Filipović and W. Pietsch: Four new X-ray-selected supernova remnants in the Large Magellanic Cloud. *Astron. Astrophys.* 561, A76 (2014).
- Magliocchetti, M., D. Lutz, D. Rosario, S. Berta, E. Le Floch, B. Magnelli, F. Pozzi, L. Riguccini and P. Santini: The PEP survey: infrared properties of radio-selected AGN. *Mon. Not. R. Astron. Soc.* 442, 682-693 (2014).
- Magnelli, B., D. Lutz, A. Saintonge, S. Berta, P. Santini, M. Symeonidis, B. Altieri, P. Andreani, H. Aussel, M. Béthermin, J. Bock, A. Bongiovanni, J. Cepa, A. Cimatti, A. Conley, E. Daddi, D. Elbaz, N.M. Förster Schreiber, R. Genzel, R.J. Ivison, E. Le Floch, G. Magdis, R. Maiolino, R. Nordon, S.J. Oliver, M. Page, A. Pérez García, A. Poglitsch, P. Popesso, F. Pozzi, L. Riguccini, G. Rodighiero, D. Rosario, I. Roseboom, M. Sanchez-Portal, D. Scott, E. Sturm, L.J. Tacconi, I. Valtchanov, L. Wang and S. Wuyts: The evolution of the dust temperatures of galaxies in the SFR- M_* plane up to $z \sim 2$. *Astron. Astrophys.* 561, A86 (2014).
- Maier, C., S.J. Lilly, B.L. Ziegler, T. Contini, E. Pérez Montero, Y. Peng and I. Balestra: The Mass-Metallicity and Fundamental Metallicity Relations at $z > 2$ Using Very Large Telescope and Subaru Near-infrared Spectroscopy of zCOSMOS Galaxies. *Ap. J.* 792, 3 (2014).
- Mantovani, G., K. Nandra and G. Ponti: Relativistic iron $K\alpha$ line detection in the Suzaku spectra of IC 4329A. *Mon. Not. R. Astron. Soc.* 442, L95-L99 (2014).
- Mantz, A.B., Z. Abdulla, J.E. Carlstrom, C.H. Greer, E.M. Leitch, D.P. Marrone, S. Muchovej, C. Adami, M. Birkinshaw, M. Bremer, N. Clerc, P. Giles, C. Horellou, B. Maughan, F. Pacaud, M. Pierre and J. Willis: The XXL Survey. V. Detection of the Sunyaev-Zel'dovich Effect of the Redshift 1.9 Galaxy Cluster XLSSU J021744.1-034536 with CARMA. *Ap. J.* 794, 157 (2014).
- Marion, L., O. Absil, S. Ertel, J.-B. Le Bouquin, J.-C. Augereau, N. Blind, D. Defrère, J. Lebreton and J. Milli: Searching for faint companions with VLTI/PIONIER. II. 92 main sequence stars from the Exozodi survey. *Astron. Astrophys.* 570, A127 (2014).
- Martin-Carrillo, A., L. Hanlon, M. Topinka, A.P. La Cluyzé, V. Savchenko, D.A. Kann, A.S. Trotter, S. Covino, T. Krühler, J. Greiner, S. McGlynn, D. Murphy, P. Tisdall, S. Meehan, C. Wade, B. McBreen, D.E. Reichart, D. Fugazza, J.B. Haislip, A. Rossi, P. Schady, J. Elliott and S. Klose: GRB 120711A: an intense INTEGRAL burst with long-lasting soft γ -ray emission and a powerful optical flash. *Astron. Astrophys.* 567, A84 (2014).
- Marton, G., R. Vavrek, C. Kiss and T.G. Müller: First results with the boloSource() algorithm: photometry of faint standard stars observed by Herschel/PACS. *Experimental Astronomy* 37, 347-356 (2014).
- Maseda, M.V., A. van der Wel, H.-W. Rix, ..., N.M. Förster Schreiber, et al.: The Nature of Extreme Emission Line Galaxies at $z = 1-2$: Kinematics and Metallicities from Near-infrared Spectroscopy. *Ap. J.* 791, 17 (2014).
- Matsukiyo, S. and M. Scholer: Simulations of pickup ion mediated quasi-perpendicular shocks: Implications for the heliospheric termination shock. *J. Geophys. Res. (Space Physics)*, 119, Issue 4, 2388-2399 (2014).
- Mazzalay, X., W. Maciejewski, P. Erwin, R.P. Saglia, R. Bender, M.H. Fabricius, N. Nowak, S.P. Rusli and J. Thomas: Molecular gas in the centre of nearby galaxies from VLT/SINFONI integral field spectroscopy - II. Kinematics. *Mon. Not. R. Astron. Soc.* 438, 2036-2064 (2014).

- McDermid, R.M., M. Cappellari, K. Alatalo, ..., S. Khochfar, et al.: Connection between Dynamically Derived Initial Mass Function Normalization and Stellar Population Parameters. *Ap. J. Lett.* 792, L37 (2014).
- McDonald, M., B.A. Benson, A. Vikhlinin, ..., J.J. Mohr, et al.: The Redshift Evolution of the Mean Temperature, Pressure, and Entropy Profiles in 80 SPT-Selected Galaxy Clusters. *Ap. J.* 794, 67 (2014).
- McHardy, I.M., D.T. Cameron, T. Dwelly, S. Connolly, P. Lira, D. Emmanoulopoulos, J. Gelbord, E. Breedt, P. Arevalo and P. Uttley: Swift monitoring of NGC 5548: X-ray reprocessing and short-term UV/optical variability. *Mon. Not. R. Astron. Soc.* 444, 1469-1474 (2014).
- McQuinn, K.B.W., J.M. Cannon, A.E. Dolphin, E.D. Skillman, J.J. Salzer, M.P. Haynes, E. Adams, I. Cave, E.C. Elson, R. Giovanelli, J. Ott and A. Saintonge: Distance Determinations to SHIELD Galaxies from Hubble Space Telescope Imaging. *Ap. J.* 785, 3 (2014).
- Meneghetti, M., E. Rasia, J. Vega, ..., S. Seitz, et al.: The MUSIC of CLASH: Predictions on the Concentration-Mass Relation. *Ap. J.* 797, 34 (2014).
- Merloni, A., A. Bongiorno, M. Brusa, K. Iwasawa, V. Mainieri, B. Magnelli, M. Salvato, S. Berta, N. Cappelluti, A. Comastri, F. Fiore, R. Gilli, A. Koekemoer, E. Le Floch, E. Lusso, D. Lutz, T. Miyaji, F. Pozzi, L. Riguccini, D.J. Rosario, J. Silverman, M. Symeonidis, E. Treister, C. Vignali and G. Zamorani: The incidence of obscuration in active galactic nuclei. *Mon. Not. R. Astron. Soc.* 437, 3550-3567 (2014).
- Messias, H., J.M. Afonso, M. Salvato, B. Mobasher and A.M. Hopkins: The dependency of AGN infrared colour-selection on source luminosity and obscuration. An observational perspective in CDFS and COSMOS. *Astron. Astrophys.* 562, A144 (2014).
- Michalowski, M.J., L.K. Hunt, E. Palazzi, S. Savaglio, ..., S. Berta, et al.: Spatially-resolved dust properties of the GRB 980425 host galaxy. *Astron. Astrophys.* 562, A70 (2014).
- Miotello, A., S. Bruderer and E.F. van Dishoeck: Protoplanetary disk masses from CO isotopologue line emission. *Astron. Astrophys.* 572, A96 (2014).
- Modest, H.L., C. R ath, A.J. Banday, K.M. G orski and G.E. Morfill: Correlating Fourier phase information with real-space higher order statistics in CMB data. *Physical Review D* 89, 123004 (2014).
- Mok, A., M.L. Balogh, S.L. McGee, D.J. Wilman, A. Finoguenov, M. Tanaka, R.G. Bower, A. Hou, J.S. Mulchaey and L.C. Parker: Star formation and environmental quenching of GEEC2 group galaxies at $z \sim 1$. *Mon. Not. R. Astron. Soc.* 438, 3070-3085 (2014).
- Monna, A., S. Seitz, N. Greisel, T. Eichner, N. Drory, M. Postman, A. Zitrin, D. Coe, A. Halkola, S.H. Suyu, C. Grillo, P. Rosati, D. Lemze, I. Balestra, J. Snigula, et al.: CLASH: $z \sim 6$ young galaxy candidate quintuply lensed by the frontier field cluster RXC J2248.7-4431. *Mon. Not. R. Astron. Soc.* 438, 1417-1434 (2014).
- Mottram, J.C., L.E. Kristensen, E.F. van Dishoeck, S. Bruderer, I. San Jos -Garc a, A. Karska, R. Visser, G. Santangelo, A.O. Benz, E.A. Bergin, P. Caselli, F. Herpin, M.R. Hogerheijde, D. Johnstone, T.A. van Kempen, R. Liseau, B. Nisini, M. Tafalla, F.F.S. van der Tak and F. Wyrowski: Water in star-forming regions with Herschel (WISH). V. The physical conditions in low-mass protostellar outflows revealed by multi-transition water observations. *Astron. Astrophys.* 572, A21 (2014).
- Mottram, J.C., L.E. Kristensen, E.F. van Dishoeck, S. Bruderer, I. San Jos -Garc a, A. Karska, R. Visser, G. Santangelo, A.O. Benz, E.A. Bergin, P. Caselli, F. Herpin, M.R. Hogerheijde, D. Johnstone, T.A. van Kempen, R. Liseau, B. Nisini, M. Tafalla, F.F.S. van der Tak and F. Wyrowski: Water in star-forming regions with Herschel (WISH). V. The physical conditions in low-mass protostellar outflows revealed by multi-transition water observations. *Astron. Astrophys.* 572, A21 (2014).

- Moór, A., T.G. Müller, C. Kiss, Z. Balog, N. Billot and G. Marton: PACS photometer calibration block analysis. *Experimental Astronomy* 37, 225-238 (2014).
- Murata, K.L., M. Kajisawa, Y. Taniguchi, M.A.R. Kobayashi, Y. Shioya, P. Capak, O. Ilbert, A.M. Koekemoer, M. Salvato and N.Z. Scoville: Evolution of the Fraction of Clumpy Galaxies at $0.2 < z < 1.0$ in the COSMOS Field. *Ap. J.* 786, 15 (2014).
- Müller, C., M. Kadler, R. Ojha, M. Perucho, C. Großberger, E. Ros, J. Wilms, J. Blanchard, M. Böck, B. Carpenter, M. Dutka, P. G. Edwards, H. Hase, S. Horiuchi, A. Kreikenbohm, J. E. J. Lovell, A. Markowitz, C. Phillips, C. Plötz, T. Pursimo, J. Quick, R. Rothschild, R. Schulz, T. Steinbring, J. Stevens, J. Trüstedt, A.K. Tzioumis: TANAMI monitoring of Centaurus A: The complex dynamics in the inner parsec of an extragalactic jet. *Astron. Astrophys.* 569, A115, (2014).
- Müller, T., Z. Balog, M. Nielbock, T. Lim, D. Teyssier, M. Olberg, U. Klaas, H. Linz, B. Altieri, C. Pearson, G. Bendo and E. Vilenius: Herschel celestial calibration sources. Four large main-belt asteroids as prime flux calibrators for the far-IR/sub-mm range. *Experimental Astronomy* 37, 253-330 (2014).
- Müller, T.G., C. Kiss, P. Scheirich, P. Pravec, L. O'Rourke, E. Vilenius and B. Altieri: Thermal infrared observations of asteroid (99942) Apophis with Herschel. *Astron. Astrophys.* 566, A22 (2014).
- Müller, T.G., S. Hasegawa and F. Usui: (25143) Itokawa: The power of radiometric techniques for the interpretation of remote thermal observations in the light of the Hayabusa rendezvous results*. *Publ. Astron. Soc. Jpn.* 66, 52 (2014).
- Naab, T., L. Oser, E. Emsellem, ..., S. Khochfar, et al.: The ATLAS^{3D} project - XXV. Two-dimensional kinematic analysis of simulated galaxies and the cosmological origin of fast and slow rotators. *Mon. Not. R. Astron. Soc.* 444, 3357-3387 (2014).
- Nardini, M., J. Elliott, R. Filgas, P. Schady, J. Greiner, T. Krühler, S. Klose, P. Afonso, D.A. Kann, A. Nicuesa Guelbenzu, F. Olivares E., A. Rau, A. Rossi, V. Sudilovsky and S. Schmidl: Afterglow rebrightenings as a signature of a long-lasting central engine activity?. The emblematic case of GRB 100814A. *Astron. Astrophys.* 562, A29 (2014).
- Nastasi, A., H. Böhringer, R. Fassbender, A. de Hoon, G. Lamer, J.J. Mohr, N. Padilla, G.W. Pratt, H. Quintana, P. Rosati, J.S. Santos, A.D. Schwobe, R. Šuhada and M. Verdugo: Kinematic analysis of a sample of X-ray luminous distant galaxy clusters. The $L_X - \sigma_v$ relation in the $z > 0.6$ universe. *Astron. Astrophys.* 564, A17 (2014).
- Neilsen, J., M. Coriat, R. Fender, J.C. Lee, G. Ponti, A.K. Tzioumis, P.G. Edwards and J.W. Broderick: A Link between X-Ray Emission Lines and Radio Jets in 4U 1630-47?. *Ap. J. Lett.* 784, L5 (2014).
- Neistein, E. and H. Netzer: What triggers black hole growth? Insights from star formation rates. *Mon. Not. R. Astron. Soc.* 437, 3373-3384 (2014).
- Nelson, E., P. van Dokkum, M. Franx, G. Brammer, I. Momcheva, N. Förster Schreiber, E. da Cunha, L. Tacconi, R. Bezanson, A. Kirkpatrick, J. Leja, H.-W. Rix, R. Skelton, A. van der Wel, K. Whitaker and S. Wuyts: A massive galaxy in its core formation phase three billion years after the Big Bang. *Nature* 513, 394-397 (2014).
- Neufeld, D.A., A. Gusdorf, R. Güsten, G.J. Herczeg, L. Kristensen, G.J. Melnick, B. Nisini, V. Ossenkopf, M. Tafalla and E.F. van Dishoeck: The Water Abundance behind Interstellar Shocks: Results from Herschel/PACS and Spitzer/IRS Observations of H₂O, CO, and H₂. *Ap. J.* 781, 102 (2014).
- Newman, S.F., P. Buschkamp, R. Genzel, N.M. Förster Schreiber, J. Kurk, A. Sternberg, O. Gnat, D. Rosario, C. Mancini, S.J. Lilly, A. Renzini, A. Burkert, C.M. Carollo, G. Cresci, R. Davies, F. Eisenhauer, S. Genel, K. Shapiro Griffin, E.K.S. Hicks, D. Lutz, T. Naab, Y. Peng, L.J. Tacconi, S. Wuyts, G. Zamorani, D. Vergani and B.J. Weiner: Nebular Excitation in $z \sim 2$ Star-forming Galaxies from the SINS and LUCI Surveys:

- The Influence of Shocks and Active Galactic Nuclei. *Ap. J.* 781, 21 (2014).
- Nicuesa Guelbenzu, A., S. Klose, M.J. Michalowski, S. Savaglio, D.A. Kann, A. Rossi, L.K. Hunt, J. Gorosabel, J. Greiner, M.R.G. McKenzie, E. Palazzi and S. Schmid: Another Short-burst Host Galaxy with an Optically Obscured High Star Formation Rate: The Case of GRB 071227. *Ap. J.* 789, 45 (2014).
- Nosenko, V., A.V. Ivlev, R. Kompaneets and G. Morfill: Stability and size of particle pairs in complex plasmas. *Phys. Plasmas* 21, 113701 (2014).
- Occhiogrosso, A., A. Vasyunin, E. Herbst, S. Viti, M.D. Ward, S.D. Price and W.A. Brown: Ethylene oxide and acetaldehyde in hot cores. *Astron. Astrophys.* 564, A123 (2014).
- Ogiya, G., M. Mori, T. Ishiyama and A. Burkert: The connection between the cusp-to-core transformation and observational universalities of DM haloes. *Mon. Not. R. Astron. Soc.* 440, L71-L75 (2014).
- Oya, Y., N. Sakai, T. Sakai, Y. Watanabe, T. Hirota, J.E. Lindberg, S.E. Bisschop, J.K. Jørgensen, E.F. van Dishoeck and S. Yamamoto: A Substellar-mass Protostar and its Outflow of IRAS 15398-3359 Revealed by Subarcsecond-resolution Observations of H₂CO and CCH. *Ap. J.* 795, 152 (2014).
- Padilla, N. D., S. Salazar-Albornoz, S. Contreras, S. A. Cora and A. N. Ruiz: Stochastic angular momentum slews and flips and their effect on discs in galaxy formation models. *Mon. Not. R. Astron. Soc.* 443, 2801-2814 (2014).
- Panagoulia, E.K., A.C. Fabian and J.S. Sanders: A volume-limited sample of X-ray galaxy groups and clusters - I. Radial entropy and cooling time profiles. *Mon. Not. R. Astron. Soc.* 438, 2341-2354 (2014).
- Panagoulia, E.K., A.C. Fabian, J.S. Sanders and J. Hlavacek-Larrondo: A volume-limited sample of X-ray galaxy groups and clusters - II. X-ray cavity dynamics. *Mon. Not. R. Astron. Soc.* 444, 1236-1259 (2014).
- Paschmann, G., M. Øieroset and T. Phan: In-Situ Observations of Reconnection in Space. In Book: „Microphysics of Cosmic Plasmas“. (Eds.) A. Balogh, A. Bykov, P. Cargill, R. Dendy, T. Dudok. Springer Science-Business Media, Dordrecht, The Netherlands, 309-341 (2014).
- Paumard, T., O. Pfuhl, F. Martins, P. Kervella, T. Ott, J.-U. Pott, J.B. Le Bouquin, J. Breifelder, S. Gillessen, G. Perrin, L. Burtscher, X. Haubois and W. Brandner: GCIRS 7, a pulsating M1 supergiant at the Galactic centre. Physical properties and age. *Astron. Astrophys.* 568, A85 (2014).
- Pelzer, G., A. Zang, G. Anton, F. Bayer, F. Horn, M. Kraus, J. Rieger, A. Ritter, J. Wandner, T. Weber, A. Fauler, M. Fiederle, W.S. Wong, M. Campbell, J. Meiser, P. Meyer, J. Mohr and T. Michel: Energy weighted x-ray dark-field imaging. *Optics Express* 22, 24507 (2014).
- Percival, W.J., A.J. Ross, A.G. Sánchez, L. Samushia, A. Burden, R. Crittenden, A.J. Cuesta, M.V. Magana, M. Manera, F. Beutler, C.-H. Chuang, D.J. Eisenstein, S. Ho, C.K. McBride, F. Montesano, N. Padmanabhan, B. Reid, S. Saito, D.P. Schneider, H.-J. Seo, R. Tojeiro and B.A. Weaver: The clustering of Galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: including covariance matrix errors. *Mon. Not. R. Astron. Soc.* 439, 2531-2541 (2014).
- Persson, M.V., J.K. Jørgensen, E.F. van Dishoeck and D. Harsono: The deuterium fractionation of water on solar-system scales in deeply-embedded low-mass protostars. *Astron. Astrophys.* 563, A74 (2014).
- Pfuhl, O., T. Alexander, S. Gillessen, F. Martins, R. Genzel, F. Eisenhauer, T.K. Fritz and T. Ott: Massive Binaries in the Vicinity of Sgr A*. *Ap. J.* 782, 101 (2014).
- Phan, T.D., J.F. Drake, M.A. Shay, J.T. Gosling, G. Paschmann, J.P. Eastwood, M. Oie-

- roset, M. Fujimoto and V. Angelopoulos: Ion bulk heating in magnetic reconnection exhausts at Earth's magnetopause: Dependence on the inflow Alfvén speed and magnetic shear angle. *Geophys. Res. Lett.* 41, 7002-7010 (2014).
- Phleps, S., D.J. Wilman, S. Zibetti and T. Budavári: More than just halo mass: modelling how the red galaxy fraction depends on multiscale density in an HOD framework. *Mon. Not. R. Astron. Soc.* 438, 2233-2252 (2014).
- Pineda, J.E., S.P. Quanz, F. Meru, G.D. Mulders, M.R. Meyer, O. Panić and H. Avenhaus: Resolved Images of the Protoplanetary Disk around HD 100546 with ALMA. *Ap. J. Lett.* 788, L34 (2014).
- Pinto, C., A.C. Fabian, N. Werner, P. Kosec, J. Ahoranta, J. de Plaa, J.S. Kaastra, J.S. Sanders, Y.-Y. Zhang and A. Finoguenov: Discovery of O VII line emitting gas in elliptical galaxies. *Astron. Astrophys.* 572, L8 (2014).
- Pires, A.M., F. Haberl, V.E. Zavlin, C. Motch, S. Zane and M.M. Hohle: XMM-Newton reveals a candidate period for the spin of the „Magnificent Seven“ neutron star RX J1605.3+3249. *Astron. Astrophys.* 563, A50 (2014).
- Planck Collaboration, P.A.R. Ade, N. Aghanim, C. Armitage-Caplan, ..., H. Böhringer, ..., G. Chon, ..., et al.: Planck 2013 results. XX. Cosmology from Sunyaev-Zeldovich cluster counts. *Astron. Astrophys.* 571, A20 (2014).
- Planck Collaboration, P.A.R. Ade, N. Aghanim, C. Armitage-Caplan, ... H. Böhringer, ..., G. Chon, et al.: Planck 2013 results. XXIX. The Planck catalogue of Sunyaev-Zeldovich sources. *Astron. Astrophys.* 571, A29 (2014).
- Planck Collaboration, P.A.R. Ade, N. Aghanim, M. Arnaud, ..., G. Chon, et al.: Planck intermediate results. XIII. Constraints on peculiar velocities. *Astron. Astrophys.* 561, A97 (2014).
- Planck Collaboration, P.A.R. Ade, N. Aghanim, M.I.R. Alves, ... H. Böhringer, ..., G. Chon, ..., et al.: Planck 2013 results. I. Overview of products and scientific results. *Astron. Astrophys.* 571, A1 (2014).
- Plant, D.S., R.P. Fender, G. Ponti, T. Muñoz-Darias and M. Coriat: Revealing accretion on to black holes: X-ray reflection throughout three outbursts of GX 339-4. *Mon. Not. R. Astron. Soc.* 442, 1767-1785 (2014).
- Podio, L., I. Kamp, C. Codella, B. Nisini, G. Aresu, S. Brittain, S. Cabrit, C. Dougados, C. Grady, R. Meijerink, G. Sandell, M. Spaans, W.-F. Thi, G.J. White and P. Woitke: Probing the Gaseous Disk of T Tau N with CN 5-4 Lines. *Ap. J. Lett.* 783, L26 (2014).
- Pon, A., D. Johnstone, J. Bally and C. Heiles: Kompaneets model fitting of the Orion-Eridanus superbubble. *Mon. Not. R. Astron. Soc.* 444, 3657-3669 (2014).
- Pon, A., D. Johnstone, J. Bally and C. Heiles: The origin of ionized filaments within the Orion-Eridanus superbubble. *Mon. Not. R. Astron. Soc.* 441, 1095-1104 (2014).
- Pon, A., D. Johnstone, M.J. Kaufman, P. Caselli and R. Plume: Mid-J CO observations of Perseus B1-East 5: evidence for turbulent dissipation via low-velocity shocks. *Mon. Not. R. Astron. Soc.* 445, 1508-1520 (2014).
- Ponti, G., T. Muñoz-Darias and R.P. Fender: A connection between accretion state and Fe K absorption in an accreting neutron star: black hole-like soft-state winds?. *Mon. Not. R. Astron. Soc.* 444, 1829-1834 (2014).
- Preece, R., J.M. Burgess, A. von Kienlin, ..., J. Greiner, et al.: The First Pulse of the Extremely Bright GRB 130427A: A Test Lab for Synchrotron Shocks. *Science* 343, 51-54 (2014).
- Presotto, V., M. Girardi, M. Nonino, ..., S. Seitz, et al.: Intracluster light properties in the CLASH-VLT cluster MACS J1206.2-0847. *Astron. Astrophys.* 565, A126 (2014).

- Price, S.H., M. Kriek, G.B. Brammer, C. Conroy, N.M. Förster Schreiber, M. Franx, M. Fumagalli, B. Lundgren, I. Momcheva, E.J. Nelson, R.E. Skelton, P.G. van Dokkum, K.E. Whitaker and S. Wuyts: Direct Measurements of Dust Attenuation in $z \sim 1.5$ Star-forming Galaxies from 3D-HST: Implications for Dust Geometry and Star Formation Rates. *Ap. J.* 788, 86 (2014).
- Prieto, M.A., M. Mezcua, J.A. Fernández-Ontiveros and M. Schartmann: The central parsecs of active galactic nuclei: challenges to the torus. *Mon. Not. R. Astron. Soc.* 442, 2145-2164 (2014).
- Rangel, C., K. Nandra, G. Barro, M. Brightman, L. Hsu, M. Salvato, A.M. Koekemoer, M. Brusa, E.S. Laird, J.R. Trump, D.J. Croton, D.C. Koo, D. Kocevski, J.L. Donley, N.P. Hathi, M. Peth, S.M. Faber, M. Mozena, N.A. Grogin, H.C. Ferguson and K. Lai: Evidence for two modes of black hole accretion in massive galaxies at $z \sim 2$. *Mon. Not. R. Astron. Soc.* 440, 3630-3644 (2014).
- Rigby, E.E., N.A. Hatch, H.J.A. Röttgering, B. Sibthorpe, Y.K. Chiang, R. Overzier, R. Herbonnet, S. Borgani, D.L. Clements, H. Dannerbauer, C. de Breuck, G. de Lucia, J. Kurk, F. Maschietto, G. Miley, A. Saro, N. Seymour and B. Venemans: Searching for large-scale structures around high-redshift radio galaxies with Herschel. *Mon. Not. R. Astron. Soc.* 437, 1882-1893 (2014).
- Rigby, J.R., M.B. Bayliss, M.D. Gladders, K. Sharon, E. Wuyts and H. Dahle: On the Lack of Correlation between Mg II 2796, 2803 Å and Ly α Emission in Lensed Star-forming Galaxies. *Ap. J.* 790, 44 (2014).
- Rodighiero, G., A. Renzini, E. Daddi, I. Baronchelli, S. Berta, G. Cresci, A. Franceschini, C. Gruppioni, D. Lutz, C. Mancini, P. Santini, G. Zamorani, J. Silverman, D. Kashino, P. Andreani, A. Cimatti, H.D. Sánchez, E. Le Floch, B. Magnelli, P. Popesso and F. Pozzi: A multiwavelength consensus on the main sequence of star-forming galaxies at $z \sim 2$. *Mon. Not. R. Astron. Soc.* 443, 19-30 (2014).
- Ross, A.J., L. Samushia, A. Burden, ..., A.G. Sánchez, et al.: The clustering of galaxies in the SDSS-III DR10 Baryon Oscillation Spectroscopic Survey: no detectable colour dependence of distance scale or growth rate measurements. *Mon. Not. R. Astron. Soc.* 437, 1109-1126 (2014).
- Rossi, A., S. Piranomonte, S. Savaglio, E. Palazzi, M.J. Michalowski, S. Klose, L.K. Hunt, L. Amati, J. Elliott, J. Greiner, C. Guidorzi, J. Japelj, D.A. Kann, B. Lo Faro, A. Nicuesa Guelbenzu, S. Schulze, S.D. Vergani, L.A. Arnold, S. Covino, V. D'Elia, P. Ferrero, R. Filgas, P. Goldoni, A. Küpcü Yoldaş, D. Le Borgne, E. Pian, P. Schady and G. Stratta: A quiescent galaxy at the position of the long GRB 050219A. *Astron. Astrophys.* 572, A47 (2014).
- Rovilos, E., I. Georgantopoulos, A. Akylas, J. Aird, D.M. Alexander, A. Comastri, A. Del Moro, P. Gandhi, A. Georgakakis, C.M. Harrison and J.R. Mullaney: A wide search for obscured active galactic nuclei using XMM-Newton and WISE. *Mon. Not. R. Astron. Soc.* 438, 494-512 (2014).
- Ruan, J.J., S.F. Anderson, J. Dexter, E. Agol: Evidence for Large Temperature Fluctuations in Quasar Accretion Disks from Spectral Variability. *ApJ* 783, 105 (2014).
- Ruel, J., G. Bazin, M. Bayliss, ..., J.J. Mohr, et al.: Optical Spectroscopy and Velocity Dispersions of Galaxy Clusters from the SPT-SZ Survey. *Ap. J.* 792, 45 (2014).
- Russell, H.R., A.C. Fabian, B.R. McNamara, A.C. Edge, J.S. Sanders, P.E.J. Nulsen, S.A. Baum, M. Donahue and C.P. O'Dea: The bow shock, cold fronts and disintegrating cool core in the merging galaxy group RX J0751.3+5012. *Mon. Not. R. Astron. Soc.* 444, 629-641 (2014).
- Röcker, T.B., A.V. Ivlev, S.K. Zhdanov and G.E. Morfill: Effect of strong wakes on waves in two-dimensional plasma crystals. *Physical Review E* 89, 013104 (2014).

- Röcker, T.B., A.V. Ivlev, S.K. Zhdanov, L. Couédel and G.E. Morfill: Wake-induced bending of two-dimensional plasma crystals. *Phys. Plasmas* 21, 073711 (2014).
- Röcker, T.B., L. Couédel, S.K. Zhdanov, V. Nosenko, A.V. Ivlev, H.M. Thomas and G.E. Morfill: Nonlinear regime of the mode-coupling instability in 2D plasma crystals. *EPL (Europhysics Letters)* 106, 45001 (2014).
- Sadibekova, T., M. Pierre, N. Clerc, L. Faccioli, R. Gastaud, J.-P. Le Fevre, E. Rozo and E. Rykoff: The X-CLASS-redMaPPer galaxy cluster comparison. I. Identification procedures. *Astron. Astrophys.* 571, A87 (2014).
- Salazar-Albornoz, S., A.G. Sánchez, N.D. Padilla and C.M. Baugh: Clustering tomography: measuring cosmological distances through angular clustering in thin redshift shells. *Mon. Not. R. Astron. Soc.* 443, 3612-3623 (2014).
- Samushia, L., B.A. Reid, M. White, ..., F. Montesano, ..., A.G. Sánchez, et al.: The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: measuring growth rate and geometry with anisotropic clustering. *Mon. Not. R. Astron. Soc.* 439, 3504-3519 (2014).
- Sanders, J.S., A.C. Fabian, J. Hlavacek-Larrondo, H.R. Russell, G.B. Taylor, F. Hofmann, G. Tremblay and S.A. Walker: Feedback, scatter and structure in the core of the PKS 0745-191 galaxy cluster. *Mon. Not. R. Astron. Soc.* 444, 1497-1517 (2014).
- Sanders, J.S., A.C. Fabian, M. Sun, E. Churazov, A. Simionescu, S.A. Walker and N. Werner: The X-ray coronae of the two brightest galaxies in the Coma cluster. *Mon. Not. R. Astron. Soc.* 439, 1182-1192 (2014).
- Santangelo, G., B. Nisini, C. Codella, A. Lorenzani, U.A. Yildiz, S. Antonucci, P. Bjerkerli, S. Cabrit, T. Giannini, L.E. Kristensen, R. Liseau, J.C. Mottram, M. Tafalla and E.F. van Dishoeck: Water distribution in shocked regions of the NGC 1333-IRAS 4A protostellar outflow. *Astron. Astrophys.* 568, A125 (2014).
- Santangelo, G., S. Antonucci, B. Nisini, C. Codella, P. Bjerkerli, T. Giannini, A. Lorenzani, L.K. Lundin, S. Cabrit, L. Calzoletti, R. Liseau, D. Neufeld, M. Tafalla and E.F. van Dishoeck: First spectrally-resolved H₂ observations towards HH 54. Low H₂O abundance in shocks. *Astron. Astrophys.* 569, L8 (2014).
- Santini, P., R. Maiolino, B. Magnelli, D. Lutz, A. Lamastra, G. Li Causi, S. Eales, P. Andreani, S. Berta, V. Buat, A. Cooray, G. Cresci, E. Daddi, D. Farrah, A. Fontana, A. Franceschini, R. Genzel, G. Granato, A. Grazian, E. Le Floc'h, G. Magdis, M. Magliocchetti, F. Mannucci, N. Menci, R. Nordon, S. Oliver, P. Popesso, F. Pozzi, L. Riguccini, G. Rodighiero, D.J. Rosario, M. Salvato, D. Scott, L. Silva, L. Tacconi, M. Viero, L. Wang, S. Wuyts and K. Xu: The evolution of the dust and gas content in galaxies. *Astron. Astrophys.* 562, A30 (2014).
- Santos, J.S., B. Altieri, M. Tanaka, I. Valtchanov, A. Saintonge, M. Dickinson, S. Foucaud, T. Kodama, T.D. Rawle and K. Tadaki: Star formation in the cluster CLG0218.3-0510 at $z = 1.62$ and its large-scale environment: the infrared perspective. *Mon. Not. R. Astron. Soc.* 438, 2565-2577 (2014).
- Saro, A., J. Liu, J.J. Mohr, et al.: Constraints on the CMB temperature evolution using multiband measurements of the Sunyaev-Zel'dovich effect with the South Pole Telescope. *Mon. Not. R. Astron. Soc.* 440, 2610-2615 (2014).
- Sartoris, B., A. Biviano, P. Rosati, ..., S. Seitz, et al.: CLASH-VLT: Constraints on the Dark Matter Equation of State from Accurate Measurements of Galaxy Cluster Mass Profiles. *Ap. J. Lett.* 783, L11 (2014).
- Sauvage, M., K. Okumura, U. Klaas, T. Müller, A. Moór, A. Poglitsch, H. Feuchtgruber and L. Duband: Operations and performance of the PACS instrument ³He sorption cooler on board of the Herschel space observatory. *Experimental Astronomy* 37, 397-431 (2014).

- Scaringi, S., T.J. Maccarone and M. Middleton: Reversibility of time series: revealing the hidden messages in X-ray binaries and cataclysmic variables. *Mon. Not. R. Astron. Soc.* 445, 1031-1038 (2014).
- Scaringi, S.: A physical model for the flickering variability in cataclysmic variables. *Mon. Not. R. Astron. Soc.* 438, 1233-1241 (2014).
- Schady, P., S. Savaglio, T. Müller, T. Krühler, T. Dwelly, E. Palazzi, L.K. Hunt, J. Greiner, H. Linz, M.J. Michalowski, D. Pierini, S. Piranomonte, S.D. Vergani and W.K. Gear: Herschel observations of gamma-ray burst host galaxies: implications for the topology of the dusty interstellar medium. *Astron. Astrophys.* 570, A52 (2014).
- Schartmann, M., K. Wada, M.A. Prieto, A. Burkert and K.R.W. Tristram: Time-resolved infrared emission from radiation-driven central obscuring structures in active galactic nuclei. *Mon. Not. R. Astron. Soc.* 445, 3878-3891 (2014).
- Schauer, A.T.P., R.-S. Remus, A. Burkert and P.H. Johansson: The Mystery of the σ -Bump - A New Signature for Major Mergers in Early-type Galaxies?. *Ap. J. Lett.* 783, L32 (2014).
- Schmalzl, M., R. Visser, C. Walsh, T. Albertsson, E.F. van Dishoeck, L.E. Kristensen and J.C. Mottram: Water in low-mass star-forming regions with Herschel. The link between water gas and ice in protostellar envelopes. *Astron. Astrophys.* 572, A81 (2014).
- Schnorr-Müller, A., T. Storchi-Bergmann, N.M. Nagar and F. Ferrari: Gas inflows towards the nucleus of the active galaxy NGC 7213. *Mon. Not. R. Astron. Soc.* 438, 3322-3331 (2014).
- Schnorr-Müller, A., T. Storchi-Bergmann, N.M. Nagar, A. Robinson, D. Lena, R.A. Riffel and G.S. Couto: Feeding and feedback in the inner kiloparsec of the active galaxy NGC 2110. *Mon. Not. R. Astron. Soc.* 437, 1708-1724 (2014).
- Schulze, S., D. Malesani, A. Cucchiara, ..., P. Schady, ..., J. Greiner, ..., and E. Wuyts: GRB 120422A/SN 2012bz: Bridging the gap between low- and high-luminosity gamma-ray bursts. *Astron. Astrophys.* 566, A102 (2014).
- Schwabe, M., S. Zhdanov, C. Räth, D.B. Graves, H.M. Thomas and G.E. Morfill: Collective Effects in Vortex Movements in Complex Plasmas. *Phys. Rev. Lett.* 112, 115002 (2014).
- Schönenbach, T., G. Caspar, P.O. Hess, T. Boller, A. Müller, M. Schäfer and W. Greiner: Ray-tracing in pseudo-complex General Relativity. *Mon. Not. R. Astron. Soc.* 442, 121-130 (2014).
- Serra, P., L. Oser, D. Krajnović, ..., S. Khochfar, et al.: The ATLAS^{3D} project - XXVI. H I discs in real and simulated fast and slow rotators. *Mon. Not. R. Astron. Soc.* 444, 3388-3407 (2014).
- Sharon, K., M.D. Gladders, J.R. Rigby, E. Wuyts, M.B. Bayliss, T.L. Johnson, M.K. Florian and H. Dahle: The Mass Distribution of the Strong Lensing Cluster SDSS J1531+3414. *Ap. J.* 795, 50 (2014).
- Shimizu, S., S. Barczyk, P. Rettberg, T. Shimizu, T. Klaempfl, J.L. Zimmermann, T. Hoeschen, C. Linsmeier, P. Weber, G.E. Morfill and H.M. Thomas: Cold atmospheric plasma - A new technology for spacecraft component decontamination. *Planet. Space Sci.* 90, 60-71 (2014).
- Shore, S.N., I. de Gennaro Aquino, S. Scaringi and H. van Winckel: On the Raman O VI and related lines in classical novae. *Astron. Astrophys.* 570, L4 (2014).
- Simmons, B.D., T. Melvin, C. Lintott, ..., A. Galametz, ..., M. Salvato, ..., and S. Wuyts: Galaxy Zoo: CANDELS barred discs and bar fractions. *Mon. Not. R. Astron. Soc.* 445, 3466-3474 (2014).
- Skelton, R.E., K.E. Whitaker, I.G. Momcheva, ..., N.M. Förster Schreiber, ..., and S. Wuyts:

- 3D-HST WFC3-selected photometric catalogs in the five CANDELS/3D-HST fields: photometry, photometric redshifts, and stellar masses. *Ap. J. Suppl. Ser.* 214, 24-72 (2014).
- Skinner, G.K.: Antimatter in the universe and the PAMELA/FERMI/AMS anomaly. *International Journal of Modern Physics Conference Series* 30, 60255 (2014).
- Smolčić, V., P. Ciliegi, V. Jelić, M. Bondi, E. Schinnerer, C.L. Carilli, D.A. Riechers, M. Salvato, A. Brković, P. Capak, O. Ilbert, A. Karim, H. McCracken and N.Z. Scoville: The VLA-COSMOS Survey - V. 324 MHz continuum observations. *Mon. Not. R. Astron. Soc.* 443, 2590-2598 (2014).
- Soldi, S., V. Beckmann, W.H. Baumgartner, G. Ponti, C.R. Shrader, P. Lubiński, H.A. Krimm, F. Mattana and J. Tueller: Long-term variability of AGN at hard X-rays. *Astron. Astrophys.* 563, A57 (2014).
- Song, M., S.L. Finkelstein, K. Gebhardt, G.J. Hill, N. Drory, M.L.N. Ashby, G.A. Blanc, J. Bridge, T. Chonis, R. Ciardullo, M. Fabricius, G.G. Fazio, E. Gawiser, C. Gronwall, A. Hagen, J.-S. Huang, S. Jogee, R. Livermore, B. Salmon, D.P. Schneider, S.P. Willner and G.R. Zeimann: The HETDEX Pilot Survey. V. The Physical Origin of Ly α Emitters Probed by Near-infrared Spectroscopy. *Ap. J.* 791, 3 (2014).
- Steinacker, J., M. Andersen, W.-F. Thi and A. Bacmann: Detecting scattered light from low-mass molecular cores at 3.6 μ m. Impact of global effects on the observation of coreshine. *Astron. Astrophys.* 563, A106 (2014).
- Steinhardt, C.L., J.S. Speagle, P. Capak, J.D. Silverman, M. Carollo, J. Dunlop, Y. Hashimoto, B.-C. Hsieh, O. Ilbert, O. Le Fevre, E. Le Floc'h, N. Lee, L. Lin, Y.-T. Lin, D. Masters, H.J. McCracken, T. Nagao, A. Petric, M. Salvato, D. Sanders, N. Scoville, K. Sheth, M.A. Strauss and Y. Taniguchi: Star Formation at $4 < z < 6$ from the Spitzer Large Area Survey with Hyper-Suprime-Cam (SPLASH). *Ap. J. Lett.* 791, L25 (2014).
- Stern, D., G.B. Lansbury, R.J. Assef, ..., M. Brightman, et al.: NuSTAR and XMM-Newton Observations of Luminous, Heavily Obscured, WISE-selected Quasars at $z \sim 2$. *Ap. J.* 794, 102 (2014).
- Sturm, R., F. Haberl, G. Vasilopoulos, E.S. Bartlett, P. Maggi, A. Rau, J. Greiner and A. Udalski: Discovery of SXP 265, a Be/X-ray binary pulsar in the Wing of the Small Magellanic Cloud. *Mon. Not. R. Astron. Soc.* 444, 3571-3580 (2014).
- Suutarinen, A.N., L.E. Kristensen, J.C. Mottram, H.J. Fraser and E.F. van Dishoeck: Water and methanol in low-mass protostellar outflows: gas-phase synthesis, ice sputtering and destruction. *Mon. Not. R. Astron. Soc.* 440, 1844-1855 (2014).
- Symeonidis, M., A. Georgakakis, M.J. Page, J. Bock, M. Bonzini, V. Buat, D. Farrah, A. Franceschini, E. Ibar, D. Lutz, B. Magnelli, G. Magdis, S.J. Oliver, M. Pannella, M. Paolillo, D. Rosario, I.G. Roseboom, M. Vaccari and C. Villforth: Linking the X-ray and infrared properties of star-forming galaxies at $z < 1.5$. *Mon. Not. R. Astron. Soc.* 443, 3728-3740 (2014).
- Symeonidis, M., S.R. Oates, M. de Pasquale, M.J. Page, K. Wiersema, R. Starling, P. Schady, N. Seymour and B. O'Halloran: Herschel/PACS observations of the host galaxy of GRB 031203. *Mon. Not. R. Astron. Soc.* 443, L124-L128 (2014).
- Sánchez, A.G., F. Montesano, E.A. Kazin, et al.: The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: cosmological implications of the full shape of the clustering wedges in the data release 10 and 11 galaxy samples. *Mon. Not. R. Astron. Soc.* 440, 2692-2713 (2014).
- Sánchez, C., M. Carrasco Kind, ..., S. Seitz, et al.: Photometric redshift analysis in the Dark Energy Survey Science Verification data. *Mon. Not. R. Astron. Soc.* 445, 1482-1506 (2014).

- Sánchez-Portal, M., A. Marston, B. Altieri, H. Aussel, H. Feuchtgruber, U. Klaas, H. Linz, D. Lutz, B. Merín, T. Müller, M. Nielbock, M. Oort, G. Pilbratt, M. Schmidt, C. Stephenson and M. Tuttlebee: The pointing system of the Herschel space observatory. Description, Calibration, Performance and improvements. *Experimental Astronomy* 37, 453-479 (2014).
- Sódor, Á., P. de Cat, D.J. Wright, ..., S. Scaringi, et al.: Extensive study of HD 25558, a long-period double-lined binary with two SPB components. *Mon. Not. R. Astron. Soc.* 438, 3535-3556 (2014).
- Tadaki, K., T. Kodama, I. Tanaka, M. Hayashi, Y. Koyama and R. Shimakawa: The Nature of Halpna-selected Galaxies at $z > 2$. II. Clumpy Galaxies and Compact Star-forming Galaxies. *Ap. J.* 780, 77-88 (2014).
- Tadaki, K., T. Kodama, Y. Tamura, M. Hayashi, Y. Koyama, R. Shimakawa, I. Tanaka, K. Kohno, B. Hatsukade and K. Suzuki: Evidence for a Gas-rich Major Merger in a Proto-cluster at $z = 2.5$. *Ap. J. Lett.* 788, 23-28 (2014).
- Talia, M., A. Cimatti, M. Mignoli, L. Pozzetti, A. Renzini, J. Kurk and C. Halliday: Listening to galaxies tuning at $z \sim 2.5$ -3.0: The first strikes of the Hubble fork. *Astron. Astrophys.* 562, A113 (2014).
- Tang, Y., M. Gialalisco, Y. Guo and J. Kurk: Probing Outflows in $z = 1 \sim 2$ Galaxies through Fe II/Fe II* Multiplets. *Ap. J.* 793, 92 (2014).
- Taquet, V., S.B. Charnley and O. Sipilä: Multilayer Formation and Evaporation of Deuterated Ices in Prestellar and Protostellar Cores. *Ap. J.* 791, 1 (2014).
- Tasca, L.A.M., O. Le Fèvre, C. López-Sanjuan, ..., M. Salvato, et al.: Evidence for major mergers of galaxies at $2 < z < 4$ in the VVDS and VUDS surveys. *Astron. Astrophys.* 565, A10 (2014).
- Thi, W.-F., C. Pinte, E. Pantin, J.C. Augereau, G. Meeus, F. Ménard, C. Martin-Zaïdi, P. Woitke, P. Riviere-Marichalar, I. Kamp, A. Carmona, G. Sandell, C. Eiroa, W. Dent, B. Montesinos, G. Aresu, R. Meijerink, M. Spaans, G. White, D. Ardila, J. Lebreton, I. Mendigutía and S. Brittain: Gas lines from the 5-Myr old optically thin disk around HD 141569A. Herschel observations and modeling. *Astron. Astrophys.* 561, A50 (2014).
- Thomas, J., R.P. Saglia, R. Bender, P. Erwin and M. Fabricius: The Dynamical Fingerprint of Core Scouring in Massive Elliptical Galaxies. *Ap. J.* 782, 39 (2014).
- Toft, S., V. Smolčić, B. Magnelli, A. Karim, A. Zirm, M. Michalowski, P. Capak, K. Sheth, K. Schawinski, J.-K. Krogager, S. Wuyts, D. Sanders, A.W.S. Man, D. Lutz, J. Staguhn, S. Berta, H. McCracken, J. Krpan and D. Riechers: Submillimeter Galaxies as Progenitors of Compact Quiescent Galaxies. *Ap. J.* 782, 68 (2014).
- Tojeiro, R., A.J. Ross, A. Burden, ..., F. Montesano, ..., A.G. Sánchez, et al.: The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: galaxy clustering measurements in the low-redshift sample of Data Release 11. *Mon. Not. R. Astron. Soc.* 440, 2222-2237 (2014).
- Tortora, C., N.R. Napolitano, R.P. Saglia, A.J. Romanowsky, G. Covone and M. Capaccioli: Evolution of central dark matter of early-type galaxies up to $z \sim 0.8$. *Mon. Not. R. Astron. Soc.* 445, 162-174 (2014).
- Traulsen, I., K. Reinsch, A.D. Schwope, R. Schwarz, F.M. Walter and V. Burwitz: Phase-resolved X-ray spectroscopy and spectral energy distribution of the X-ray soft polar RS Caeli. *Astron. Astrophys.* 562, A42 (2014).
- Tremblay, G.R., M.D. Gladders, S.A. Baum, C.P. O'Dea, M.B. Bayliss, K.C. Cooke, H. Dahle, T.A. Davis, M. Florian, J.R. Rigby, K. Sharon, E. Soto and E. Wuyts: A 30 kpc Chain of „Beads on a String“ Star Formation between Two Merging Early Type Galaxies in the Core of a Strong-lensing Galaxy Cluster. *Ap. J. Lett.* 790, L26 (2014).

- Tristram, K.R.W., L. Burtscher, W. Jaffe, K. Meisenheimer, S.F. Hönig, M. Kishimoto, M. Schartmann and G. Weigelt: The dusty torus in the Circinus galaxy: a dense disk and the torus funnel. *Astron. Astrophys.* 563, A82 (2014).
- Trump, J.R., G. Barro, S. Juneau, ..., K. Nandra, D.J. Rosario, et al.: No More Active Galactic Nuclei in Clumpy Disks Than in Smooth Galaxies at $z \sim 2$ in CANDELS/3D-HST. *Ap. J.* 793, 101 (2014).
- Tsytovich, V.N., A.V. Ivlev, A. Burkert and G.E. Morfill: Compact Dusty Clouds in a Cosmic Environment. *Ap. J.* 780, 131 (2014).
- Umetsu, K., E. Medezinski, M. Nonino, ..., S. Seitz, ..., I. Balestra, et al.: CLASH: Weakening Shear-and-magnification Analysis of 20 Galaxy Clusters. *Ap. J.* 795, 163 (2014).
- Urban, O., A. Simionescu, N. Werner, S.W. Allen, S. Ehlert, I. Zhuravleva, R.G. Morris, A.C. Fabian, A. Mantz, P.E.J. Nulsen, J.S. Sanders and Y. Takei: Azimuthally resolved X-ray spectroscopy to the edge of the Perseus Cluster. *Mon. Not. R. Astron. Soc.* 437, 3939-3961 (2014).
- Urrutia-Viscarra, F., M. Arnaboldi, C. Mendes de Oliveira, O. Gerhard, S. Torres-Flores, E.R. Carrasco and D. de Mello: A census of H α emitters in the intergalactic medium of the NGC 2865 system. *Astron. Astrophys.* 569, A97 (2014).
- Usachev, A., A. Zobnin, O. Petrov, V. Fortov, M.H. Thoma, H. Höfner, M. Fink, A. Ivlev and G. Morfill: Externally excited planar dust acoustic shock waves in a strongly coupled dusty plasma under microgravity conditions. *New J. Phys.* 16, 053028 (2014).
- Usachev, A., A. Zobnin, O. Petrov, V. Fortov, M.H. Thoma, H. Höfner, M. Fink, A. Ivlev and G. Morfill: Externally excited planar dust acoustic shock waves in a strongly coupled dusty plasma under microgravity conditions. *New J. Phys.* 16, 053028 (2014).
- Usui, F., S. Hasegawa, M. Ishiguro, T.G. Müller and T. Ootsubo: A comparative study of infrared asteroid surveys: IRAS, AKARI, and WISE. *Publ. Astron. Soc. Jpn.* 66, 56 (2014).
- van Dishoeck, E.: Building stars, planets, and the ingredients for life between the stars (2013 Halley lecture). *The Observatory* 134, 9-14 (2014).
- van Dokkum, P. G., R. Bezanson, A. van der Wel, E.J. Nelson, I. Momcheva, R.E. Skelton, K.E. Whitaker, G. Brammer, C. Conroy, N.M. Förster Schreiber, M. Fumagalli, M. Kriek, I. Labbé, J. Leja, D. Marchesini, A. Muzzin, P. Oesch and S. Wuyts: Dense cores in galaxies out to $z = 2.5$ in SDSS, UltraVISTA, and the five 3D-HST/CANDELS fields: number density, evolution, and the apparent need for efficient cooling at high redshift. *Ap. J.* 791, 45-62 (2014).
- van der Marel, N., E.F. van Dishoeck, S. Bruderer and T.A. van Kempen: Warm formaldehyde in the Ophiuchus IRS 48 transitional disk. *Astron. Astrophys.* 563, A113 (2014).
- van der Wel, A., M. Franx, P.G. van Dokkum, ..., S. Wuyts, et al.: 3D-HST+CANDELS: The Evolution of the Galaxy Size-Mass Distribution since $z = 3$. *Ap. J.* 788, 28 (2014).
- van Daalen, M.P., J. Schaye, I.G. McCarthy, C.M. Booth and C. Dalla Vecchia: The impact of baryonic processes on the two-point correlation functions of galaxies, subhaloes and matter. *Mon. Not. R. Astron. Soc.* 440, 2997-3010 (2014).
- van Eerten, H.: Self-similar relativistic blast waves with energy injection. *Mon. Not. R. Astron. Soc.* 442, 3495-3510 (2014).
- van Eerten, H.J.: Gamma-ray burst afterglow plateau break time-luminosity correlations favour thick shell models over thin shell models. *Mon. Not. R. Astron. Soc.* 445, 2414-2423 (2014).
- van der Plas, G., S. Casassus, F. Ménard, S. Perez, W.F. Thi, C. Pinte and V. Christiaens: Spatially Resolved HCN J = 4-3 and CS J = 7-6 Emission from the Disk around HD

142527. *Ap. J. Lett.* 792, L25 (2014).
- van der Wiel, M.H.D., D.A. Naylor, I. Kamp, F. Ménard, W.-F. Thi, P. Woitke, G. Olofsson, K.M. Pontoppidan, J. Di Francesco, A.M. Glauser, J.S. Greaves and R.J. Ivison: Signatures of warm carbon monoxide in protoplanetary discs observed with Herschel SPIRE. *Mon. Not. R. Astron. Soc.* 444, 3911-3925 (2014).
- Vargas-Magaña, M., S. Ho, X. Xu, A.G. Sánchez, R. O'Connell, D.J. Eisenstein, A.J. Cuesta, W.J. Percival, A.J. Ross, E. Aubourg, J.R. Brownstein, S. Escoffier, D. Kirkby, M. Manera, D.P. Schneider, J.L. Tinker and B.A. Weaver: The clustering of Galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: potential systematics in fitting of baryon acoustic feature. *Mon. Not. R. Astron. Soc.* 445, 2-28 (2014).
- Vasilopoulos, G., F. Haberl, R. Sturm, P. Maggi and A. Udalski: Spectral and temporal properties of RX J0520.5-6932 (LXP 8.04) during a type-I outburst. *Astron. Astrophys.* 567, A129 (2014).
- Veilleux, S., S.H. Teng, D.S.N. Rupke, R. Maiolino and E. Sturm: Half-megasecond Chandra Spectral Imaging of the Hot Circumgalactic Nebula around Quasar Mrk 231. *Ap. J.* 790, 116 (2014).
- Vilenius, E., C. Kiss, T. Müller, M. Mommert, P. Santos-Sanz, A. Pál, J. Stansberry, M. Müller, N. Peixinho, E. Lellouch, S. Fornasier, A. Delsanti, A. Thirouin, J.L. Ortiz, R. Duffard, D. Perna and F. Henry: "TNOs are Cool": A survey of the trans-Neptunian region. X. Analysis of classical Kuiper belt objects from Herschel and Spitzer observations. *Astron. Astrophys.* 564, A35 (2014).
- Villforth, C., F. Hamann, D. J. Rosario, et al.: Morphologies of $z \sim 0.7$ AGN host galaxies in CANDELS: no trend of merger incidence with AGN luminosity. *Mon. Not. R. Astron. Soc.* 439, 3342-3356 (2014).
- Vincent, F.H., T. Paumard, G. Perrin, P. Varniere, F. Casse, F. Eisenhauer, S. Gillessen and P.J. Armitage: Distinguishing an ejected blob from alternative flare models at the Galactic Centre with GRAVITY. *Mon. Not. R. Astron. Soc.* 441, 3477-3487 (2014).
- Viti, S., S. García-Burillo, A. Fuente, ..., and L.J. Tacconi: Molecular line emission in NGC 1068 imaged with ALMA. II. The chemistry of the dense molecular gas. *Astron. Astrophys.* 570, A28 (2014).
- Vito, F., R. Gilli, C. Vignali, A. Comastri, M. Brusa, N. Cappelluti and K. Iwasawa: The hard X-ray luminosity function of high-redshift ($3 < z \lesssim 5$) active galactic nuclei. *Mon. Not. R. Astron. Soc.* 445, 3557-3574 (2014).
- Vito, F., R. Maiolino, P. Santini, M. Brusa, A. Comastri, G. Cresci, D. Farrah, A. Franceschini, R. Gilli, G.L. Granato, C. Gruppioni, D. Lutz, F. Mannucci, F. Pozzi, D.J. Rosario, D. Scott, M. Viero and C. Vignali: Black hole accretion preferentially occurs in gas-rich galaxies*. *Mon. Not. R. Astron. Soc.* 441, 1059-1065 (2014).
- von Kienlin, A., C.A. Meegan, W.S. Paciesas, ..., J. Greiner, D. Gruber, ..., A. Rau, ..., and H.-F. Yu: The Second Fermi GBM Gamma-Ray Burst Catalog: The First Four Years. *Ap. J. Supp. Ser.* 211, 13 (2014).
- Vreeswijk, P.M., S. Savaglio, A. Gal-Yam, et al.: The Hydrogen-poor Superluminous Supernova iPTF 13ajg and its Host Galaxy in Absorption and Emission. *Ap. J.* 797, 24 (2014).
- Walker, S.A., A.C. Fabian and J.S. Sanders: Large-scale gas sloshing out to half the virial radius in the strongest cool core REXCESS galaxy cluster, RXJ2014.8-2430. *Mon. Not. R. Astron. Soc.* 441, L31-L35 (2014).
- Walker, S.A., A.C. Fabian, H.R. Russell and J.S. Sanders: The effect of the quasar H1821+643 on the surrounding intracluster medium: revealing the underlying cooling flow. *Mon. Not. R. Astron. Soc.* 442, 2809-2816 (2014).

- Weijmans, A.-M., P.T. de Zeeuw, E. Emsellem, ..., S. Khochfar, et al.: The ATLAS $3D$ project - XXIV. The intrinsic shape distribution of early-type galaxies. *Mon. Not. R. Astron. Soc.* 444, 3340-3356 (2014).
- Weinzirl, T., S. Jogee, E. Neistein, S. Khochfar, J. Kormendy, ..., P. Erwin and T. Puzia: The HST/ACS Coma Cluster Survey - VII. Structure and assembly of massive galaxies in the centre of the Coma cluster. *Mon. Not. R. Astron. Soc.* 441, 3083-3121 (2014).
- Whitaker, K.E., J.R. Rigby, G.B. Brammer, M.D. Gladders, K. Sharon, S.H. Teng and E. Wuyts: Resolved Star Formation on Sub-galactic Scales in a Merger at $z = 1.7$. *Ap. J.* 790, 143 (2014).
- Wiersema, K., S. Covino, K. Toma, A.J. van der Horst, K. Varela, M. Min, J. Greiner, R.L.C. Starling, N.R. Tanvir, R.A.M.J. Wijers, S. Campana, P.A. Curran, Y. Fan, J.P.U. Fynbo, J. Gorosabel, A. Gomboc, D. Götz, J. Hjorth, Z.P. Jin, S. Kobayashi, C. Kouveliotou, C. Mundell, P.T. O'Brien, E. Pian, A. Rowlinson, D.M. Russell, R. Salvaterra, S. di Serego Alighieri, G. Tagliaferri, S.D. Vergani, J. Elliott, C. Fariña, O.E. Hartoog, R. Karjalainen, S. Klose, F. Knust, A.J. Levan, P. Schady, V. Sudilovsky and R. Willingale: Circular polarization in the optical afterglow of GRB 121024A. *Nature* 509, 201-204 (2014).
- Williams, B.F., D. Hatzidimitriou, J. Green, G. Vasilopoulos, R. Covarrubias, W.N. Pietsch, H. Stiele, F. Haberl and P. Bonfini: A spectroscopic search for high-mass X-ray binaries in M31. *Mon. Not. R. Astron. Soc.* 443, 2499-2516 (2014).
- Williams, C.C., M. Giavalisco, P. Cassata, ..., S. Wuyts, et al.: The Progenitors of the Compact Early-type Galaxies at High Redshift. *Ap. J.* 780, 1 (2014).
- Williams, R.J., R. Maiolino, P. Santini, A. Marconi, G. Cresci, F. Mannucci and D. Lutz: Dynamics and metallicity of far-infrared selected galaxies. *Mon. Not. R. Astron. Soc.* 443, 3780-3794 (2014).
- Wittenmyer, R.A., J. Horner, C.G. Tinney, R.P. Butler, H.R.A. Jones, M. Tuomi, G.S. Salter, B.D. Carter, F.E. Koch, S.J. O'Toole, J. Bailey and D. Wright: The Anglo-Australian Planet Search. XXIII. Two New Jupiter Analogs. *Ap. J.* 783, 103 (2014).
- Wittenmyer, R.A., M. Tuomi, R.P. Butler, H.R.A. Jones, G. Anglada-Escudé, J. Horner, C.G. Tinney, J.P. Marshall, B.D. Carter, J. Bailey, G.S. Salter, S.J. O'Toole, D. Wright, J.D. Crane, S.A. Schectman, P. Arriagada, I. Thompson, D. Minniti, J.S. Jenkins and M. Diaz: GJ 832c: A Super-Earth in the Habitable Zone. *Ap. J.* 791, 114 (2014).
- Wittenmyer, R.A., X. Tan, M.H. Lee, J. Horner, C.G. Tinney, R.P. Butler, G.S. Salter, B.D. Carter, H.R.A. Jones, S.J. O'Toole, J. Bailey, D. Wright, J.D. Crane, S.A. Schectman, P. Arriagada, I. Thompson, D. Minniti and M. Diaz: A Detailed Analysis of the HD 73526 2:1 Resonant Planetary System. *Ap. J.* 780, 140 (2014).
- Wu, X., O. Gerhard, T. Naab, L. Oser, I. Martinez-Valpuesta, M. Hilz, E. Churazov and N. Lyskova: The mass and angular momentum distribution of simulated massive early-type galaxies to large radii. *Mon. Not. R. Astron. Soc.* 438, 2701-2715 (2014).
- Wuyts, E., J. Kurk, N.M. Förster Schreiber, R. Genzel, E. Wisnioski, K. Bandara, S. Wuyts, A. Beffori, R. Bender, G.B. Brammer, A. Burkert, P. Buschkamp, C.M. Carollo, J. Chan, R. Davies, F. Eisenhauer, M. Fossati, S.K. Kulkarni, P. Lang, S.J. Lilly, D. Lutz, C. Mancini, J.T. Mendel, I.G. Momcheva, T. Naab, E.J. Nelson, A. Renzini, D. Rosario, R.P. Saglia, S. Seitz, R.M. Sharples, A. Sternberg, S. Tacchella, L.J. Tacconi, P. van Dokkum and D.J. Wilman: A Consistent Study of Metallicity Evolution at $0.8 < z < 2.6$. *Ap. J. Lett.* 789, L40 (2014).
- Wuyts, E., J.R. Rigby, M.D. Gladders and K. Sharon: A Magnified View of the Kinematics and Morphology of RCGA 032727-132609: Zooming in on a Merger at $z = 1.7$. *Ap. J.* 781, 61 (2014).

- Yajima, H. and S. Khochfar: Angular momentum loss of primordial gas in Ly α radiation field. *Mon. Not. R. Astron. Soc.* 441, 769-775 (2014).
- Yaroshenko, V.V., H. Lühr and W.J. Miloch: Dust charging in the Enceladus torus. *J. Geophys. Res. (Space Phys.)* 119, 221-236 (2014).
- Yazdi, A., A. Ivlev, S. Khrapak, H. Thomas, G.E. Morfill, H. Löwen, A. Wysocki and M. Sperl: Glass-transition properties of Yukawa potentials: From charged point particles to hard spheres. *Physical Review E* 89, 063105 (2014).
- Younes, G., C. Kouveliotou, A.J. van der Horst, ..., A. von Kienlin, et al.: Time Resolved Spectroscopy of SGR J1550-5418 Bursts Detected with Fermi/Gamma-Ray Burst Monitor. *Ap. J.* 785, 52 (2014).
- Young, J.E., M. Eracleous, O. Shemmer, H. Netzer, C. Gronwall, D. Lutz, R. Ciardullo and E. Sturm: Locating star-forming regions in quasar host galaxies. *Mon. Not. R. Astron. Soc.* 438, 217-239 (2014).
- Young, L.M., N. Scott, P. Serra, ..., R.L. Davies, ..., S. Khochfar, et al.: The ATLAS^{3D} project - XXVII. Cold gas and the colours and ages of early-type galaxies. *Mon. Not. R. Astron. Soc.* 444, 3408-3426 (2014).
- Zapata, L.A., H.G. Arce, E. Brassfield, A. Palau, N. Patel and J.E. Pineda: A spider-like outflow in Barnard 5 - IRS 1: the transition from a collimated jet to a wide-angle outflow?. *Mon. Not. R. Astron. Soc.* 441, 3696-3702 (2014).
- Zhdanov, S.K., V. Nosenko, H.M. Thomas, G.E. Morfill and L. Couëdel: Observation of particle pairing in a two-dimensional plasma crystal. *Physical Review E* 89, 023103 (2014).
- Zhou, G., D.D.R. Bayliss, L. Kedziora-Chudczer, G. Salter, C.G. Tinney and J. Bailey: K_s-band secondary eclipses of WASP-19b and WASP-43b with the Anglo-Australian Telescope. *Mon. Not. R. Astron. Soc.* 445, 2746-2757 (2014).
- Zhukhovitskii, D.I., V.E. Fortov, V.I. Molotkov, A.M. Lipaev, V.N. Naumkin, H.M. Thomas, A.V. Ivlev and G.E. Morfill: Study of the Projectile Motion in a Dust Crystal Under Microgravity Conditions. *IEEE Trans. Plasma Sci.* 42, 2678-2679 (2014).
- Ziparo, F., P. Popesso, A. Finoguenov, A. Biviano, S. Wuyts, D. Wilman, M. Salvato, M. Tanaka, K. Nandra, D. Lutz, D. Elbaz, M. Dickinson, B. Altieri, H. Aussel, S. Berta, A. Cimatti, D. Fadda, R. Genzel, E. Le Floc'h, B. Magnelli, R. Nordon, A. Poglitsch, F. Pozzi, M.S. Portal, L. Tacconi, F.E. Bauer, W.N. Brandt, N. Cappelluti, M.C. Cooper and J.S. Mulchaey: Reversal or no reversal: the evolution of the star formation rate-density relation up to $z \sim 1.6$. *Mon. Not. R. Astron. Soc.* 437, 458-474 (2014).
- Zoccali, M., O.A. Gonzalez, S. Vasquez, V. Hill, M. Rejkuba, E. Valenti, A. Renzini, A. Rojas-Arriagada, I. Martinez-Valpuesta, C. Babusiaux, T. Brown, D. Minniti and A. McWilliam: The GIRAFFE Inner Bulge Survey (GIBS). I. Survey description and a kinematical map of the Milky Way bulge. *Astron. Astrophys.* 562, A66 (2014).

8.2 Instrumentelle Veröffentlichungen

- Anugu, N., P. Garcia, A. Amorim, P. Gordo, F. Eisenhauer, G. Perrin, W. Brandner, C. Straubmeier and K. Perraut: Near-infrared aberration tracking using a correlation algorithm on the Galactic Center. In Proc. of „Adaptive Optics Systems IV“, Montreal, Canada, 2014. (Eds.) E. Marchetti, L.M. Close, J.-P. Véran. SPIE Conference Proceedings 9148E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91485B, 11 pp. (2014).
- Anugu, N., P. Garcia, E. Wieprecht, A. Amorim, P. Gordo, L. Burtscher, T. Ott, P. Gordo, F. Eisenhauer, G. Perrin, W. Brandner, C. Straubmeier and K. Perraut: The GRA-

- VITY/VLTI acquisition camera software. In Proc. of „Optical and Infrared Interferometry IV“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Proceedings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91462C, 13 pp. (2014).
- Baudoz, P., A. Boccaletti, S. Lacour, R. Galicher, Y. Clénet, D. Gratadour, É. Gendron, T. Buey, G. Rousset, M. Hartl and R. Davies: The high contrast imaging modes of MICADO. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91479E, 9 pp. (2014).
- Bavdaz, M., E. Wille, K. Wallace, B. Shortt, S. Fransen, M. Collon, M. Ackermann, G. Vacanti, R. Guenther, J. Haneveld, M.O. Riekerink, C. van Baren, D. Kampf, K.-H. Zuknik, F. Christensen, D. Della Monica Ferreira, A.C. Jakobsen, M. Krumrey, P. Müller, V. Burwitz, G. Pareschi and M. Ghigo: Preparing the optics technology to observe the hot universe. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91442F, 8 pp. (2014).
- Bergbauer, B., S. Aschauer, A. Bähr, K. Hermenau, J. Horstmann, T. Lauf, P. Lechner, P. Majewski, N. Meidinger, J. Reiffers, R. Richter, C. Sandow, G. Schaller, F. Schopper, A. Stefanescu, L. Strüder and J. Treis: Electrical characterization of different DEPFET designs on die level. *Journal of Instrumentation* 9, C1020 (2014).
- Blind, N., E. Le Coarer, P. Kern and J. Bland-Hawthorn: Astrophotonic micro-spectrographs in the era of ELTs. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914729, 9 pp. (2014).
- Blind, N., F. Eisenhauer, M. Haug, S. Gillessen, M. Lippa, L. Burtscher, O. Hans, M. Haug, F. Haussmann, S. Huber, A. Janssen, S. Kellner, Y. Kok, T. Ott, O. Pfuhl, E. Sturm, J. Weber, E. Wieprecht, A. Amorim, W. Brandner, G. Perrin, K. Perraut, C. Straubmeier: GRAVITY: the calibration unit. In Proc. of „Optical and Infrared Interferometry IV“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Proceedings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91461U 12 pp. (2014).
- Blind, N., H. Huber, F. Eisenhauer, J. Weber, S. Gillessen, M. Lippa, L. Burtscher, O. Hans, M. Haug, F. Haussmann, S. Huber, A. Janssen, S. Kellner, Y. Kok, T. Ott, O. Pfuhl, E. Sturm, E. Wieprecht, A. Amorim, W. Brandner, G. Perrin, K. Perraut, C. Straubmeier: The GRAVITY metrology system: modeling a metrology in optical fibers. In Proc. of „Optical and Infrared Interferometry IV“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Proceedings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914624 20 pp. (2014).
- Breunig, E., P. Friedrich, L. Proserpio and A. Winter: Alignment and integration of slumped glass x-ray mirrors at MPE. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91444B, 9 pp. (2014).
- Breunig, E., P. Friedrich, L. Proserpio and A. Winter: Characterising x-ray mirror deformations with a phase measuring deflectometry system. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914449,

- 11 pp. (2014).
- Bryant, A., C. Fischer, R. Hönle, S. Beckmann, S. Colditz, F. Fumi, N. Geis, C. Iserlohe, R. Klein, A. Krabbe, L. Looney, A. Poglitsch, W. Raab, S. Ragan, F. Rebell and M. Savage: FIFI-LS observation planning and data reduction. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91474G, 8 pp. (2014).
- Burtscher, L., E. Wieprecht, T. Ott, Y. Kok, S. Yazici, N. Anugu, R. Dembet, P. Fedou, S. Lacour, J. Ott, T. Paumard, V. Lapeyrere, P. Kervella, R. Abuter, E. Pozna, F. Eisenhauer, N. Blind, R. Genzel, S. Gillessen, O. Hans, M. Haug, F. Haussmann, S. Kellner, M. Lippa, O. Pfuhl, E. Sturm, J. Weber, A. Amorim, W. Brandner, K. Rousset-Perraut, G.S. Perrin, C. Straubmeier, M. Schoeller: The GRAVITY instrument software / High-level software. In Proc. of „Optical and Infrared Interferometry IV“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Proceedings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91462B, 8 pp. (2014).
- Burwitz, V., P. Predehl, P. Friedrich, H. Bräuninger, J. Eder, E. Pfeffermann, W. Burkert, K. Dennerl, G. Hartner, B. Menz, M. Fürmetz, G. Valsecchi, F. Marioni and G. Grisoni: The calibration and testing of the eROSITA X-ray mirror assemblies. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91441X, 6 pp. (2014).
- Bähr, A., S. Aschauer, B. Bergbauer, K. Hermenau, T. Lauf, P. Lechner, G. Lutz, P. Majewski, N. Meidinger, D. Miessner, M. Porro, R. Richter, G. Schaller, F. Schopper, A. Stefanescu, L. Strüder and J. Treis: Spectral performance of DEPFET and gateable DEPFET macropixel devices. *Journal of Instrumentation* 9, 3018P (2014).
- Bähr, A., S. Aschauer, B. Bergbauer, P.H. Lechner, P. Majewski, N. Meidinger, S.M. Ott, M. Porro, R.H. Richter, L. Strüder and J. Treis: Development of DEPFET active pixel sensors to improve the spectroscopic response for high time resolution applications. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914411, 9 pp. (2014).
- Cirasuolo, M., J. Afonso, M. Carollo, ..., R. Bender, ..., K. Nandra, ..., R. Saglia, A. Sanchez, et al.: MOONS: the Multi-Object Optical and Near-infrared Spectrograph for the VLT. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 9147ON, 13 pp. (2014).
- Civitani, M., S. Basso, M. Ghigo, G. Pareschi, B. Salmaso, D. Spiga, G. Tagliaferri, G. Vecchi, V. Burwitz, G.D. Hartner and B. Menz: X-ray optical units made of glass: achievements and perspectives. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914416, 19 pp. (2014).
- Clénet, Y., T.M. Buey, G. Rousset, M. Cohen, P. Feautrier, E. Gendron, Z. Hubert, F. Chemla, D. Gratadour, P. Baudoz, S. Lacour, A. Boccaletti, A. Sevin, F. Vidal, R. Galicher, D. Perret, B. Le Ruyet, F. Chapron, E. Stadler, P. Rabou, L. Jocou, S. Rochat, G. Chauvin and R. Davies: Overview of the MICADO SCAO system. In Proc. of „Adaptive Optics Systems IV“, Montreal, Canada, 2014. (Eds.) E. Marchetti, L.M.

- Close, J.-P. Véran. SPIE Conference Proceedings 9148E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 9148OZ, 14 pp. (2014).
- Cohen, M., F. Chemla, T. Buey, É. Gendron, Z. Hubert, M. Hartl, Y. Clénet and R. Davies: Optical design of the relay optics for the MICADO SCAO system. In Proc. of „Adaptive Optics Systems IV“, Montreal, Canada, 2014. (Eds.) E. Marchetti, L.M. Close, J.-P. Véran. SPIE Conference Proceedings 9148E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914833, 12 pp. (2014).
- Colditz, S., R. Klein, S. Beckmann, A. Bryant, C. Fischer, F. Fumi, N. Geis, R. Hönle, A. Krabbe, L.W. Looney, A. Poglitsch, W. Raab, S.E. Ragan, F. Rebell and M.L. Savage: Bore-sight calibration of FIFI-LS: in theory, in the lab and on sky. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91474S, 12 pp. (2014).
- Collon, M.J., M. Ackermann, R. Günther, A. Chatbi, G. Vacanti, M. Vervest, A. Yanson, M.W. Beijersbergen, M. Bavdaz, E. Wille, J. Haneveld, M. Olde Riekerink, A. Koelewijn, C. van Baren, P. Müller, M. Krumrey, V. Burwitz, G. Sironi and M. Ghigo: Making the ATHENA optics using silicon pore optics. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91442G, 8 pp. (2014).
- Deen, C., P. Yang, A. Huber, M. Suarez-Valles, S. Hippler, W. Brandner, E. Gendron, Y. Clénet, S. Kendrew, A. Glauser, R. Klein, W. Laun, R. Lenzen, U. Neumann, J. Panduro, J. Ramos, R.-R. Rohloff, A. Salzinger, N. Zimmerman, T. Henning, K. Perraut, G. Perrin, C. Straubmeier, A. Amorim and F. Eisenhauer: Integration and bench testing for the GRAVITY Coudé IR adaptive optics (CIAO) wavefront sensor. In Proc. of „Adaptive Optics Systems IV“, Montreal, Canada, 2014. (Eds.) E. Marchetti, L.M. Close, J.-P. Véran. SPIE Conference Proceedings 9148E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91482T, 8 pp. (2014).
- de Jong, R.S., S. Barden, O. Bellido-Tirado, ..., R. Bender, H.-J. Hess, F. Lang-Bardl, B. Muschielok, J. Schlichter, H. Böhringer, T. Boller, A. Bongiorno, M. Brusa, T. Dwelly, A. Merloni, K. Nandra, M. Salvato, et al.: 4MOST: 4-metre Multi-Object Spectroscopic Telescope. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91470M, 14 pp. (2014).
- Deysenroth, M., M. Honsberg, H. Gemperlein, J. Ziegler, W. Raab, S. Rabien, L. Barl, W. Gässler and J.L. Borelli: ARGOS laser system mechanical design. In Proc. of „Adaptive Optics Systems IV“, Montreal, Canada, 2014. (Eds.) E. Marchetti, L.M. Close, J.-P. Véran. SPIE Conference Proceedings 9148E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91483H, 15 pp. (2014).
- Fiorini, C., B. Nasri, S. Facchinetti, L. Bombelli, P. Fischer and M. Porro: A Simple Technique for Signal Compression in High Dynamic Range, High Speed X-ray Pixel Detectors. IEEE Transactions on Nuclear Science 61, 2595-2600 (2014).
- Friedrich, P., C. Rohé, R. Gaida, J. Hartwig, F. Soller, H. Bräuninger, B. Budau, W. Burkert, V. Burwitz, J. Eder, G. Hartner, B. Menz and P. Predehl: The eROSITA x-ray baffle. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91444R, 6 pp. (2014).
- Fürmetz, M., J. Eder, E. Pfeiffermann and P. Predehl: The x-ray telescope eROSITA:

- qualification of the thermal control system. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91444X, 11 pp. (2014).
- Ge, J., B. Zhao, S. Powell, P. Jiang, B. Uzakbaiuly and D. Tanner: An infrared high resolution silicon immersion grating spectrometer for airborne and space missions. In Proc. of „Space Telescopes and Instrumentation 2014: Optical, Infrared, and Millimeter Wave“, Montreal, Canada, 2014. (Eds.) J.M. Oschmann, M. Clampin, G.G. Fazio, H.A. MacEwen. SPIE Conference Proceedings 9143E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91434T (2014).
- Ge, J., S. Powell, B. Zhao, S. Schofield, F. Varosi, C. Warner, J. Liu, S. Sithajan, L. Avner, H. Jakeman, J.A. Gittelmacher, W.A. Yoder, M. Muterspaugh, M. Williamson and J.E. Maxwell: On-sky performance of a high resolution silicon immersion grating spectrometer. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91471A (2014).
- Gössl, C., J. Snigula, M. Kodric, A. Riffeser and T. Munzert: Wendelstein Observatory control software. In Proc. of „Software and Cyberinfrastructure for Astronomy III“, Montreal, Canada, 2014. (Eds.) G. Chiozzi, N.M. Radziwill. SPIE Conference Proceedings 9152E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91520H, 7 pp. (2014).
- Götz, D., J. Osborne, B. Cordier, J. Paul, P. Evans, A. Beardmore, A. Martindale, R. Willingale, P. O'Brien, S. Basa, C. Rossin, O. Godet, N. Webb, J. Greiner, K. Nandra, N. Meidinger, E. Perinati, A. Santangelo, K. Mercier and F. Gonzalez: The micro-channel x-ray telescope for the gamma-ray burst mission SVOM. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914423, 12 pp. (2014).
- Grupp, F., E. Prieto, N. Geis, A. Bode, R. Katterloher, C. Bodendorf, D. Penka and R. Bender: The EUCLID NISP tolerancing concept and results. In Proc. of „Space Telescopes and Instrumentation 2014: Optical, Infrared, and Millimeter Wave“, Montreal, Canada, 2014. (Eds.) J.M. Oschmann, M. Clampin, G.G. Fazio, H.A. MacEwen. SPIE Conference Proceedings 9143E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91432X, 17 pp. (2014).
- Haeuser, M., F. Lang-Bardl, J. Richter, H.-J. Hess, A. Degwert, A. Karasz, R. Kosyra, U. Hopp and R. Bender: Presenting a high accuracy Theta-Phi-style fiber-positioner prototype with a 15-mm pitch. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91476V, 14 pp. (2014).
- Haug, M., F. Haussmann, S. Kellner, L. Kern, F. Eisenhauer, J.-L. Lizon, M. Dietrich and G. Thummes: Low vibration cooling using a pulse tube cooler and cryostat for the GRAVITY beam combiner instrument at the VLTI. In Proc. of „Advances in Optical and Mechanical Technologies for Telescopes and Instrumentation“, Montreal, Canada, 2014. (Eds.) R. Navarro, C.R. Cunningham, A.A. Barto. SPIE Conference Proceedings 9151E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91513C, 11 pp. (2014).
- Haynes, R., S. Barden, R. de Jong, ..., F. Grupp, H. Böhringer, T. Boller, T. Dwelly, R. Bender, et al.: The 4MOST instrument concept overview. In Proc. of „Ground-based

- and Airborne Instrumentation for Astronomy V⁴, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91476I, 12 pp. (2014).
- Hill, G.J., S.E. Tuttle, N. Drory, H. Lee, B.L. Vattiat, D.L. de Poy, J.L. Marshall, A. Kelz, D. Haynes, M.H. Fabricius, K. Gebhardt, R.D. Allen, H. Anwad, R. Bender, G. Blanc, T. Chonis, M.E. Cornell, G. Dalton, J. Good, T. Jahn, H. Kriel, M. Landriau, P.J. MacQueen, J.D. Murphy, T.W. Peterson, T. Prochaska, H. Nicklas, J. Ramsey, M.M. Roth, R.D. Savage and J. Snigula: VIRUS: production and deployment of a massively replicated fiber integral field spectrograph for the upgraded Hobby-Eberly Telescope. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V⁴“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91470Q, 27 pp. (2014).
- Hopp, U., R. Bender, F. Grupp, C. Goessl, F. Lang-Bardl, W. Mitsch, A. Riffeser and N. Ageorges: Commissioning and science verification of the 2m-Fraunhofer Wendelstein Telescope. In Proc. of „Ground-based and Airborne Telescopes V⁴“, Montreal, Canada, 2014. (Eds.) L.M. Stepp, R. Gilmozzi, H.J. Hall. SPIE Conference Proceedings 9145E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91452D, 12 pp. (2014).
- Kelz, A., T. Jahn, D. Haynes, G.J. Hill, H. Lee, J.D. Murphy, J. Neumann, H. Nicklas, M. Rutowska, C. Sandin, O. Streicher, S. Tuttle, M. Fabricius, S.M. Bauer, B. Vattiat, H. Anwad and R. Savage: VIRUS: assembly, testing and performance of 33,000 fibres for HETDEX. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V⁴“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914775, 12 pp. (2014).
- Klein, R., S. Beckmann, A. Bryant, S. Colditz, C. Fischer, F. Fumi, N. Geis, R. Hönle, A. Krabbe, L. Looney, A. Poglitsch, W. Raab, F. Rebell and M. Savage: FIFI-LS: the facility far-infrared spectrometer for SOFIA. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V⁴“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91472X, 8 pp. (2014).
- Kok, Y., M. J. Ireland, A. C. Rizzuto, P. G. Tuthill, J. G. Robertson, B. A. Warrington and W. J. Tango: Alternative approach to precision narrow-angle astrometry for Antarctic long baseline interferometry. In Proc. of „Optical and Infrared Interferometry IV⁴“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Proceedings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91462R, 17 pp. (2014).
- Kok, Y., S. Gillessen, S. Lacour, F. Eisenhauer, N. Blind, J. Weber, M. Lippa, O. Pfuhl, L. Burtscher, E. Wieprecht, T. Ott, M. Haug, S. Kellner, F. Haussmann, E. Sturm, A. Janssen, R. Genzel, G. Perrin, K. Perraut, C. Straubmeier, W. Brandner, A. Amorim and O. Hans: GRAVITY: the impact of non-common optical paths within the metrology system. In Proc. of „Optical and Infrared Interferometry IV⁴“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Proceedings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914625, 17 pp. (2014).
- Kosyra, R., C. Gössl, U. Hopp, F. Lang-Bardl, A. Riffeser, R. Bender and S. Seitz: The 64 Mpixel wide field imager for the Wendelstein 2m telescope: design and calibration. *Experimental Astronomy* 38, 213-248 (2014).
- Kulas, M., J.L. Borelli, W. Gässler, D. Peter, S. Rabien, G. Orban de Xivry, L. Busoni, M. Bonaglia, T. Mazzoni and G. Rahmer: Practical experience with test-driven

- development during commissioning of the multi-star AO system ARGOS. In Proc. of „Software and Cyberinfrastructure for Astronomy III“, Montreal, Canada, 2014. (Eds.) G. Chiozzi, N.M. Radziwill. SPIE Conference Proceedings 9152E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91520D, 10 pp. (2014).
- Kuntschner, H., L. Jochum, P. Amico, ..., F. Eisenhauer, E. Sturm, H. Feuchtgruber, E.M. George, M. Hartl, R. Hofmann, H. Huber, M.P. Plattner, J. Schubert, K. Tarantik, E. Wiezorrek, et al.: ERIS: preliminary design phase overview. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91471U, 13 pp. (2014).
- Lacour, S., P. Baudoz, E. Gendron, A. Boccaletti, R. Galicher, Y. Clénet, D. Gratadour, T. Buey, G. Rousset, M. Hartl and R. Davies: An aperture masking mode for the MICADO instrument. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91479F, 7 pp. (2014).
- Lacour, S., F. Eisenhauer, S. Gillessen, O. Pfuhl, Y. Kok, G. Perrin, K. Rousset-Perraut, C. Straubmeier, W. Brandner, A. Amorim, J. Woillez, H. Bonnet: The interferometric baselines and GRAVITY astrometric error budget. In Proc. of „Optical and Infrared Interferometry IV“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Proceedings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91462E, 6 pp.(2014).
- Lazareff, B., N. Blind, L. Jocou, F. Eisenhauer, K. Perraut, S. Lacour, F. Delplancke, M. Schoeller, A. Amorim, W. Brandner, G. Perrin, C. Straubmeier: Telescope birefringence and phase errors in the Gravity instrument at the VLT interferometer. In Proc. of „Optical and Infrared Interferometry IV“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Proceedings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91460X, 15 pp. (2014).
- Lippa, M., N. Blind, S. Gillessen, Y. Kok, J. Weber, F. Eisenhauer, O. Pfuhl, A. Janssen, M. Haug, F. Haußmann, S. Kellner, O. Hans, E. Wieprecht, T. Ott, L. Burtscher, R. Genzel, E. Sturm, R. Hofmann, S. Huber, D. Huber, S. Senftleben, A. Pflüger, R. Greßmann, G. Perrin, K. Perraut, W. Brandner, C. Straubmeier, A. Amorim and M. Schöller: The GRAVITY metrology system: narrow-angle astrometry via phase-shifting interferometry. In Proc. of „Optical and Infrared Interferometry IV“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Proceedings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914622, 11 pp. (2014).
- Maciaszek, T., A. Ealet, K. Jahnke, ..., F. Grupp, C. Vogel, et al.: Euclid near infrared spectrophotometer instrument concept and first test results at the end of phase B. In Proc. of „Space Telescopes and Instrumentation 2014: Optical, Infrared, and Millimeter Wave“, Montreal, Canada, 2014. (Eds.) J.M. Oschmann, M. Clampin, G.G. Fazio, H.A. MacEwen. SPIE Conference Proceedings 9143E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91430K, 14 pp. (2014).
- Meidinger, N., K. Nandra, M. Plattner, M. Porro, A. Rau, A.E. Santangelo, C. Tenzer and J. Wilms: The wide field imager instrument for Athena. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91442J, 12 pp. (2014).

- Meidinger, N., R. Andritschke, W. Bornemann, D. Coutinho, V. Emberger, O. Hälker, W. Kink, B. Mican, S. Müller, D. Pietschner, P. Predehl and J. Reiffers: Report on the eROSITA camera system. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91441W, 12 pp. (2014).
- Menz, B., H. Bräuninger, V. Burwitz, G. Hartner and P. Predehl: Studying ATHENA optics with divergent and collimated x-ray beams. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91445J, 8 pp. (2014).
- Meuris, A., F. Pinsard, E. Doumayrou, T. Tourrette, D. Götz, M. Carty, M. Donati, L. Dumaye, A. Goetschy, F. Nico, N. Meidinger, D. Miessner and K. Mercier: The camera of the Microchannel X-ray telescope onboard the SVOM mission. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91444Z, 10 pp. (2014).
- Orban de Xivry, G., M. Bonaglia, J. Borelli, L. Busoni, C. Connot, S. Esposito, W. Gaessler, M. Kulas, T. Mazzoni, A. Puglisi, S. Rabien, J. Storm and J. Ziegler: ARGOS wavefront sensing: from detection to correction. In Proc. of „Adaptive Optics Systems IV“, Montreal, Canada, 2014. (Eds.) E. Marchetti, L.M. Close, J.-P. Véran. SPIE Conference Proceedings 9148E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914834, 10 pp. (2014).
- Ott, T.O., E.W. Wieprecht, L.B. Burtscher, Y.K. Kok, S.Y. Yazici, N.A. Anugu, R.D. Dembet, P.F. Fedou, S.L. Lacour, J.O. Ott, F.E. Eisenhauer, N.B. Blind, R.G. Genzel, S.G. Gillessen, O.H. Hans, M.H. Haug, F.H. Haussmann, S.H. Huber, A.J. Janssen, S.K. Kellner, M.L. Lippa, O.P. Pfuhl, E.S. Sturm, J.W. Weber, A.A. Amorim, W.B. Brandner, K.R. Rousselet-Perraut, G.P. Perrin, C.S. Straubmeier, M.S. Schöller and R.A. Abuter: The GRAVITY instrument software/hardware related aspects. In Proc. of „Optical and Infrared Interferometry IV“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Proceedings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, 9146-8191462A-1-91462A-6 (2014).
- Perinati, E., S. Bugiel, M. Freyberg, S. Diebold, A. Santangelo, R. Srama, C. Tenzer and A. von Kienlin: Bumper filter against micrometeoroids for eROSITA. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91444W, 6 pp. (2014).
- Perinati, E., T. Mineo, M. Freyberg, S. Diebold, A. Santangelo and C. Tenzer: Analysis of proton propagation through the eROSITA telescope. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91444V, 6 pp. (2014).
- Pfuhl, O., M. Haug, F. Eisenhauer, S. Kellner, F. Haussmann, G. Perrin, S. Gillessen, C. Straubmeier, T. Ott, K. Rousselet-Perraut, A. Amorim, M. Lippa, A. Janssen, W. Brandner, Y. Kok, N. Blind, L. Burtscher, E. Sturm, E. Wieprecht, M. Schoeller, J. Weber: The fiber coupler and beam stabilization system of the GRAVITY interferometer. In Proc. of „Optical and Infrared Interferometry IV“, Montreal, Canada, 2014. (Eds.) J.R. Rajagopal, M.C. Creech-Eakman, F.M. Malbet. SPIE Conference Procee-

- dings 9146E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914623, 14 pp. (2014).
- Porro, M., D. Bianchi, G. de Vita, S. Herrmann, A. Wassatsch, A. Bähr, B. Bergbauer, N. Meidinger, S. Ott and J. Treis: VERITAS 2.0 a multi-channel readout ASIC suitable for the DEPFET arrays of the WFI for Athena. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91445N, 8 pp. (2014).
- Predehl, P., R. Andritschke, W. Becker, W. Bornemann, H. Bräuninger, H. Brunner, T. Boller, V. Burwitz, W. Burkert, N. Clerc, E. Churazov, D. Coutinho, K. Dennerl, J. Eder, V. Emberger, T. Eraerds, M.J. Freyberg, P. Friedrich, M. Fürmetz, A. Georgakakis, C. Grossberger, F. Haberl, O. Hälker, G. Hartner, G. Hasinger, J. Hoelzl, H. Huber, A. von Kienlin, W. Kink, I. Kreykenbohm, G. Lamer, I. Lomakin, I. Lapchov, L. Lovisari, N. Meidinger, A. Merloni, B. Mican, J. Mohr, S. Müller, K. Nandra, F. Pacaud, M.N. Pavlinsky, E. Perinati, E. Pfeffermann, D. Pietschner, J. Reiffers, T. Reiprich, J. Robrade, M. Salvato, A.E. Santangelo, M. Sasaki, H. Scheuerle, C. Schmid, J. Schmitt, A.D. Schwope, R. Sunyaev, C. Tenzer, L. Tiedemann, W. Xu, V. Yaroshenko, S. Walther, M. Wille, J. Wilms and Y.-Y. Zhang: eROSITA on SRG. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91441T, 6 pp. (2014).
- Proserpio, L., E. Breunig, P. Friedrich and A. Winter: Optical design for ATHENA X-ray telescope based on slumped mirror segments. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91445L, 7 pp. (2014).
- Proserpio, L., T. Döhring, E. Breunig, P. Friedrich and A. Winter: Industrialization scenario for X-ray telescopes production based on glass slumping. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914448, 14 pp. (2014).
- Raab, W., S. Rabien, W. Gässler, S. Esposito, L. Barl, J. Borelli, M. Daysenroth, H. Gemperlein, M. Kulas and J. Ziegler: The ARGOS laser system: green light for ground layer adaptive optics at the LBT. In Proc. of „Adaptive Optics Systems IV“, Montreal, Canada, 2014. (Eds.) E. Marchetti, L.M. Close, J.-P. Véran. SPIE Conference Proceedings 9148E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91483K, 13 pp. (2014).
- Rabien, S., L. Barl, U. Beckmann, M. Bonaglia, J.L. Borelli, J. Brynnel, P. Buschkamp, L. Busoni, J. Christou, C. Connot, R. Davies, M. Deysenroth, S. Esposito, W. Gässler, H. Gemperlein, M. Hart, M. Kulas, M. Lefebvre, M. Lehmitz, T. Mazzoni, E. Nussbaum, G. Orban de Xivry, D. Peter, A. Quirrenbach, W. Raab, G. Rahmer, J. Storm and J. Ziegler: Status of the ARGOS project. In Proc. of „Adaptive Optics Systems IV“, Montreal, Canada, 2014. (Eds.) E. Marchetti, L.M. Close, J.-P. Véran. SPIE Conference Proceedings 9148E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91481B, 13 pp. (2014).
- Rahmer, G., M. Lefebvre, J. Christou, W. Raab, S. Rabien, J. Ziegler, J.L. Borelli and W. Gässler: Early laser operations at the Large Binocular Telescope Observatory. In Proc. of „Observatory Operations: Strategies, Process, and Systems V“, Montreal, Canada, 2014. (Eds.) A.B. Peck, C.R. Benn, R.L. Seaman. SPIE Conference Proceedings 9149E,

- SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91492A, 12 pp. (2014).
- Rebell, F., W. Raab, S. Colditz, S. Beckmann, A. Bryant, C. Fischer, F. Fumi, N. Geis, R. Hönle, R. Klein, A. Krabbe, L. Looney, A. Poglitsch, S. Ragan and M. Savage: Precise angular positioning at 6K: the FIFI-LS grating assembly. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914735, 9 pp. (2014).
- Sharples, R., R. Bender, A. Agudo Berbel, R. Bennett, N. Bezawada, R. Castillo, M. Cirasuolo, P. Clark, G. Davidson, R. Davies, R. Davies, M. Dubbeldam, A. Fairley, G. Finger, N.F. Schreiber, R. Genzel, R. Haefner, A. Hess, I. Jung, I. Lewis, D. Montgomery, J. Murray, B. Muschielok, J. Pirard, S. Ramsay, P. Rees, J. Richter, D. Robertson, I. Robson, S. Rolt, R. Saglia, I. Saviane, J. Schlichter, L. Schmidtobreik, A. Segovia, A. Smette, M. Tecza, S. Todd, M. Wegner and E. Wiezorrek: Performance of the K-band multi-object spectrograph (KMOS) on the ESO VLT. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91470W, 9 pp. (2014).
- Spiga, D., G. Tagliaferri, P. Soffitta, O. Citterio, S. Basso, R. Bellazzini, A. Brez, W. Burkert, V. Burwitz, E. Costa, L. de Ruvo, E. Del Monte, S. Fabiani, G. Hartner, B. Menz, M. Minuti, F. Muleri, G. Pareschi, M. Pinchera, A. Rubini, C. Sgrò and G. Spandre: Re-testing the JET-X Flight Module No. 2 at the PANTER facility. *Experimental Astronomy* 37, 37-53 (2014).
- Tuttle, S.E., G.J. Hill, H. Lee, B. Vattiat, E. Noyola, N. Drory, ..., M. Fabricius, et al.: The construction, alignment, and installation of the VIRUS spectrograph. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91470R, 13 pp. (2014).
- Vidal, F., E. Gendron, Y. Clénet, D. Gratadour, G. Rousset and R. Davies: Adaptive optics simulations for the MICADO SCAO system. In Proc. of „Adaptive Optics Systems IV“, Montreal, Canada, 2014. (Eds.) E. Marchetti, L.M. Close, J.-P. Véran. SPIE Conference Proceedings 9148E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914861, 14 pp. (2014).
- Wiest, M., S. Yazici, S. Fischer, M. Thiel, M. Haug, C. Araujo-Hauck, C. Straubmeier, I. Wank, F. Eisenhauer, G. Perrin, W. Brandner, K. Perraut, A. Amorim, M. Schöller and A. Eckart: The GRAVITY spectrometers: design report of the optomechanics and active cryogenic mechanisms. In Proc. of „Ground-based and Airborne Instrumentation for Astronomy V“, Montreal, Canada, 2014. (Eds.) S.K. Ramsay, I.S. McLean, H. Takami. SPIE Conference Proceedings 9147E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91472M, 9 pp. (2014).
- Wilms, J., T. Brand, D. Barret, T. Beuchert, J.-W. den Herder, I. Kreykenbohm, S. Lotti, N. Meidinger, K. Nandra, P. Peille, L. Piro, A. Rau, C. Schmid, R.K. Smith, C. Tenzer, M. Wille and R. Willingale: ATHENA end-to-end simulations. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91445X, 9 pp. (2014).
- Winter, A., E. Breunig, P. Friedrich and L. Proserpio: Analysis of the optical surface properties in the indirect glass slumping. In Proc. of „Space Telescopes and Instrumenta-

tion 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 914442, 6 pp. (2014).

Winter, A., E. Breunig, P. Friedrich and L. Proserpio: Progress on indirect glass slumping for future x-ray telescope optics. In Proc. of „Space Telescopes and Instrumentation 2014: Ultraviolet to Gamma Ray“, Montreal, Canada, 2014. (Eds.) T. Takahashi, J.-W. den Herder, M. Bautz. SPIE Conference Proceedings 9144E, SPIE - The International Society for Optical Engineering, Bellingham, WA USA, id. 91441C, 8 pp. (2014).

8.3 Konferenzbeiträge

Referierte Proceedings

Boller, Th., M. Roth, F. Gonzales, P. Aurora, D. Hadijimichef and C.A. Zen Vasconcello: Editors Note. In Proc. of „Third International Symposium on Strong Electromagnetic Fields and Neutron Stars SMFNS2013“, Varadero, Cuba, 2013. (Eds.) Th. Boller et al. *Astronomische Nachrichten* Vol. 335, Wiley-VCH, Berlin, 221 (2014).

Dennerl, K.: Unser Sonnensystem in Röntgenlicht – ein neuer Blick auf unsere kosmische Heimat. *Max-Planck-Gesellschaft Jahrbuch 2014*, published online (2014).

George, E. M., J. E. Austermann, J. A. Beall, et al.: A Study of Al-Mn Transition Edge Sensor Engineering for Stability. In: *Low Temperature Detectors 15 Pasadena, CA (USA)*, 2013. (Ed.) E. Shirokoff. *Journal of Low Temperature Physics* Vol. 176, Springer US, USA, 383-391 (2014).

Kanbach, G., A. Rau and A. Slowikowska: Fast photometry with small telescopes. *Contributions of the Astronomical Observatory Skalnaté Pleso* 43, 216-227 (2014).

Nicht-referierte Proceedings

Alig, C., M. Schartmann, A. Burkert and K. Dolag: Young stellar disks formed by the collision of a molecular cloud with a circumnuclear disk at the Galactic center. In Proc. of „IAUS 303: The galactic center: Feeding and feedback in a normal galactic nucleus“, Santa Fe, USA, 2013. (Eds.) L. Sjouwerman, J. Ott, C. Lang. *Proc. IAU 303*, Cambridge University Press, Cambridge, UK, 185-187 (2014).

Anthonzio, F., F. Ménard, C. Pinte, W.-F. Thi, J.-B. Lebouquin, J.-P. Berger, M. Benisty, O. Absil, G. Duchêne, B. Lazareff, F. Malbet, R. Millan-Gabet, W. Traub and G. Zins: The VLTi/PIONIER survey of southern T Tauri disks. In Proc. of „IAUS 299: Exploring the formation and evolution of planetary systems“, Victoria, Canada, 2013. (Eds.) B. Matthews, J. Graham. *Proc. IAU 299*, Cambridge University Press, Cambridge, UK, 94-98 (2014).

Bañados, E., B.P. Venemans, F. Walter, J. Kurk, R. Overzier and M. Ouchi: The galaxy environment of a QSO at $z \sim 5.7$. In Proc. of „IAUS 304: Multiwavelength AGN surveys and studies“, Byurakan, Armenia, 2013. (Eds.) A. Mickaelian, F. Aharonian, D. Sanders. *Proc. IAU 304*, Cambridge University Press, Cambridge, UK, 341-342 (2014).

Ballone, A., M. Schartmann, A. Burkert, S. Gillessen, R. Genzel, T.K. Fritz, F. Eisenhauer, O. Pfuhl and T. Ott: Hydrodynamical simulations of a compact source scenario for G2. In Proc. of „IAUS 303: The galactic center: Feeding and feedback in a normal galactic nucleus“, Santa Fe, USA, 2013. (Eds.) L. Sjouwerman, J. Ott, C. Lang. *Proc. IAU 303*, Cambridge University Press, Cambridge, UK, 307-311 (2014).

Bandyopadhyay, P., D. Sharma, U. Konopka and G. Morfill: Observation of spatio-temporal pattern in magnetised rf plasmas. In Proc. of „Int. Conf. on Complex Processes in Plasmas and nonlinear dynamical Systems“, Gandhinagar, India, 2012. (Eds.) A. Das, A. Surjalal. *AIP. Conf. Proc.* 1582, American Institute of Physics, Melville, NY USA,

- 281-287 (2014).
- Batic, M., M. Begalli, M.C. Han, S. Hauf, G. Hoff, C.H. Kim, H.S. Kim, M. Grazia Pia, P. Saracco and G. Weidenspointner: Photons Revisited. In Proc. of „SNA and MC 2013“, Paris, France, 2013. (Eds.) D. Caruge, C. Calvin, C.M. Diop, F. Malvagi, J.-C. Trama. EDP Sciences, 2014, published online, id. 02104 (2014).
- Boller, T., M. Freyberg and J. Truemper: The second ROSAT All-Sky Survey source catalogue: the deepest X-ray All-Sky Survey before eROSITA. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 40 (2014).
- Bott, K., L. Kedziora-Chudczer and J. Bailey: VSTAR Models of a Hot Jupiter. In Proc. of „IAUS 299: Exploring the formation and evolution of planetary systems“, Victoria, Canada, 2013. (Eds.) B. Matthews, J. Graham. Proc. IAU 299, Cambridge University Press, Cambridge, UK, 279-280 (2014).
- Brightman, M. and K. Nandra: Compton thick AGN in Chandra sureys. In Proc. of „IAUS 304: Multiwavelength AGN surveys and studies“, Byurakan, Armenia, 2013. (Eds.) A. Mickaelian, F. Aharonian, D. Sanders. Proc. IAU 304, Cambridge University Press, Cambridge, UK, 153-154 (2014).
- Böhringer, H.: X-ray observations of the chemical abundances in the Intra-Cluster Medium. Mem. Soc. Astron. Ital. 85, 396 (2014).
- Cappi, M., B. de Marco, G. Ponti and NGC 5548 Collaboration: Anatomy of the AGN in NGC 5548: Evidence for an unexpected, new, heavy, variable and complex absorber. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 44 (2014).
- Carrera, F., A. Georgakakis, T. Akylas, I. Georgantopoulos, A. Comastri, J. Aird and X. Barcons: Completing the census of heavily obscured AGN with Athena. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 45 (2014).
- Cavalié, T., E. Lellouch, P. Hartogh, ..., H. Feuchtgruber, et al.: The origin of external oxygen in Jupiter and Saturn's environments. In Proc. of „Annual meeting of the French Society of Astronomy and Astrophysics“, Paris, France, 2014. (Eds.) J. Ballet, F. Martins, F. Bournaud, R. Monier. In: SF2A-2014: Proceedings of the Annual meeting of the French Society of Astronomy and Astrophysics, 173-176 (2014).
- Chon, G. and H. Böhringer: Characterising our Universe with the REFLEX II cluster survey. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 48 (2014).
- Clavel, M., R. Terrier, A. Goldwurm, M.R. Morris, G. Ponti, S. Soldi and G. Trap: The reflection of two past outbursts of Sagittarius A* observed by Chandra during the last decade. In Proc. of „IAUS 303: The galactic center: Feeding and feedback in a normal galactic nucleus“, Santa Fe, USA, 2013. (Eds.) L. Sjouwerman, J. Ott, C. Lang. Proc. IAU 303, Cambridge University Press, Cambridge, UK, 344-348 (2014).
- Clavel, M., S. Soldi, R. Terrier, A. Goldwurm, M.R. Morris and G. Ponti: Modeling the propagation of Sagittarius A*'s past activity. In Proc. of „Annual meeting of the French Society of Astronomy and Astrophysics“, Paris, France, 2014. (Eds.) J. Ballet, F. Martins, F. Bournaud, R. Monier. In: SF2A-2014: Proceedings of the Annual meeting of the French Society of Astronomy and Astrophysics, 85-88 (2014).
- Clerc, N.: The cosmological analysis of large X-ray galaxy cluster surveys. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez,

- A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 238 (2014).
- Coccatto, L., M. Arnaboldi and O. Gerhard: Multi-Spin Components in the Halos of Early-Type Galaxies Revealed by Planetary Nebulae and Globular Clusters. In Proc. of „Multi-Spin Galaxies“, Naples, Italy, 2013. (Eds.) E. Iodice, M. Corsini. ASP Conf. Ser. 486, Astronomical Society of the Pacific, San Francisco, CA USA, 179 (2014).
- Davies, R.: Imminent understanding of the structure of nearby AGN from IFUs. In Proc. of „IAUS 304: Multiwavelength AGN surveys and studies“, Byurakan, Armenia, 2013. (Eds.) A. Mickaelian, F. Aharonian, D. Sanders. Proc. IAU 304, Cambridge University Press, Cambridge, UK, 252 (2014).
- De Luca, A., D. D’Agostino, F. Haberl, A. Tiengo, M. Watson and J. Wilms: The EXTrAS project: Exploring the X-ray Transient and variable Sky. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 58 (2014).
- De Marco, B.: Timing properties and X-ray lags of an ultraluminous X-ray source. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 59 (2014).
- Diehl, R.: Cosmic radioactivity and INTEGRAL results. In Proc. of „Origin of Matter and Evolution of Galaxies“, Tsukuba, Japan, 2013. (Eds.) S. Jeong, N. Imai, H. Miyatake, T. Kajino. AIP. Conf. Proc. 1594, American Institute of Physics, Melville, NY USA, 109-116 (2014).
- Dovciak, M., B. de Marco, E. Kara, G. Matt, V. Karas, G. Miniutti and W. Alston: Reverberation mapping in the lamp-post geometry of the compact corona illuminating a black-hole accretion disc in AGN. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 244 (2014).
- Fabricsius, M.H., L. Coccatto, R. Bender, N. Drory, R.P. Saglia, M. Williams and M. Landriau: Dissecting the Multi-Component Nature of NGC 7217 with VIRUS-W: Two Co-Rotating Stellar Components. In Proc. of „Multi-Spin Galaxies“, Naples, Italy, 2013. (Eds.) E. Iodice, M. Corsini. ASP Conf. Ser. 486, Astronomical Society of the Pacific, San Francisco, CA USA, 157 (2014).
- Freundlich, J., P. Salomé, F. Combes, L. Tacconi, R. Neri, S. Garcia-Burillo, R. Genzel, T. Contini and S. Lilly: High-redshift star formation efficiency as uncovered by the IRAM PHIBSS programs. In Proc. of „Annual meeting of the French Society of Astronomy and Astrophysics“, Paris, France, 2014. (Eds.) J. Ballet, F. Martins, F. Bournaud, R. Monier. In: *SF2A-2014: Proceedings of the Annual meeting of the French Society of Astronomy and Astrophysics*, 387-390 (2014).
- Fritz, T.K., S. Chatzopoulos, O. Gerhard, S. Gillessen, R. Genzel, O. Pfuhl, S. Tacchella, F. Eisenhauer and T. Ott: The nuclear cluster of the Milky Way: total mass and luminosity. In Proc. of „IAUS 303: The galactic center: Feeding and feedback in a normal galactic nucleus“, Santa Fe, USA, 2013. (Eds.) L. Sjouwerman, J. Ott, C. Lang. Proc. IAU 303, Cambridge University Press, Cambridge, UK, 248-251 (2014).
- Georgakakis, A.: Investigating different AGN fuelling modes since $z=1$. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 80 (2014).
- Giles, P., F. Pacaud and N. Clerc: The Luminosity-Temperature Relation of Clusters Detected in the XXL Survey. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA

- Publication Division, Noordwijk, The Netherlands, 83 (2014).
- Gilfanov, M. and A. Merloni: Observational Appearance of Black Holes in X-Ray Binaries and AGN. *Space Sci. Rev.* 183, 121-148 (2014).
- Gillessen, S., R. Genzel, T.K. Fritz, F. Eisenhauer, O. Pfuhl, T. Ott, A. Burkert, M. Schartmann and A. Ballone: Observations of the gas cloud G2 in the Galactic center. In Proc. of „IAUS 303: The galactic center: Feeding and feedback in a normal galactic nucleus“, Santa Fe, USA, 2013. (Eds.) L. Sjouwerman, J. Ott, C. Lang. *Proc. IAU 303*, Cambridge University Press, Cambridge, UK, 254-263 (2014).
- Gössl, C.A., J.M. Snigula and T. Munzert: Wendelstein Observatory Operations Software. In Proc. of „Astronomical Data Analysis Software and Systems XXIII“, Waikoloa Beach, Hawaii, USA, 2013. (Eds.) N. Manset, P. Forshay. *ASP Conf. Ser.* 485, Astronomical Society of the Pacific, San Francisco, CA USA, 45 (2014).
- Haberl, F.: The XMM-Newton survey of the Large (and Small) Magellanic Cloud. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 4 (2014).
- Henze, M., W. Pietsch, F. Haberl, M. della Valle, G. Sala, D. Hatzidimitriou, F. Hofmann, M. Hernanz, D. Hartmann and J. Greiner: Novae as supersoft X-ray sources in the Andromeda galaxy. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 90 (2014).
- Hofmann, F., J. Sanders, N. Clerc and K. Nandra: Galaxy Cluster Substructure Study. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 258 (2014).
- Hsu, L., M. Salvato, K. Nandra and M. Brusa: CANDELS/GOODS-S, CDFS, ECDFS: Photometric Redshifts For X-Ray Detected AGNs. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 259 (2014).
- Kaastra, J., G. Kriss, M. Cappi, M. Mehdipour, P. Petrucci, K. Steenbrugge, N. Arav, E. Behar, S. Bianchi, R. Boissay, G. Branduardi-Raymont, C. Chamberlain, E. Costantini, J. Ely, J. Ebrero, L. Di Gesu, F. Harrison, S. Kaspi, J. Malzac, B. de Marco, G. Matt, K. Nandra, S. Paltani, R. Person, B. Peterson, C. Pinto, G. Ponti, F. Pozo Nuñez, A. de Rosa, H. Seta, F. Ursini, C. de Vries, D. Walton and M. Whewell: Anatomy of the AGN in NGC 5548: Discovery of a fast and massive outflow. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 94 (2014).
- Kavanagh, P., M. Sasaki, L. Bozzetto, M. Filipović, F. Haberl, P. Maggi and S. Points: XMM-Newton observations of 30 Dor C in the Large Magellanic Cloud. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: *The X-ray Universe 2014*, ESA Publication Division, Noordwijk, The Netherlands, 96 (2014).
- Kluska, J., F. Malbet, J.-P. Berger, ..., W.-F. Thi, et al.: Imaging Young Stellar Objects with VLTi/PIONIER. In Proc. of „Improving the performances of current optical interferometers & future designs“, Haute-Provence Observatory, France, 2013. (Eds.) L. Arnold, H. Le Coroller, J. Surdej, *Proceedings of the OHP2013 Colloquium*, Observatoire de Haute-Provence, Institut Pytheas, 263-273 (2014).
- Kluska, J., F. Malbet, J.-P. Berger, ..., W.-F. Thi, et al.: First images from the PIONIER/VLTI optical interferometry imaging survey of Herbig Ae/Be stars. In Proc. of

- „IAUS 299: Exploring the Formation and Evolution of Planetary Systems“, Victoria, Canada, 2013. (Eds.) B. Matthews, J. Graham. Proc. IAU 299, Cambridge University Press, Cambridge, UK, 117-118 (2014).
- Kok, Y., M.J. Ireland, J.G. Robertson, P.G. Tuthill, B.A. Warrington and W.J. Tango: Narrow-angle Astrometry with SUSI. In Proc. of „Resolving the Future of Astronomy with long-baseline Interferometry“, Socorro, USA, 2011. (Eds.) M.J. Creech-Eakman, J.A. Guzik, R.E. Stencel. ASP Conf. Ser. 487, Astronomical Society of the Pacific, San Francisco, CA USA, 327 (2014).
- Kulkarni, S., D. Wilman, P. Erwin, J. Koppenhöfer, L. Gutierrez, J. Beckman, R. Saglia and R. Bender: H α Surface Brightness Profiles of Star-Forming Galaxies and Dependence on Halo Mass Using the HAGGIS Survey. In Proc. of „Structure and Dynamics of Disk Galaxies“, Morrilton, USA, 2013. (Eds.) M.S. Seigar, P. Treuthardt. ASP Conf. Ser. 480, Astronomical Society of the Pacific, San Francisco, CA USA, 255 (2014).
- Körner, Ch., D. Kampf, A. Poglitsch, J. Schubert, U. Ruppert and M. Schoele: Development of Cryogenic Filterwheels for the HERSCHEL Photodetector Array Camera & Spectrometer (PACS). In: Proceedings of the 42nd Aerospace Mechanisms Symposium, NASA Goddard Space Flight Center, May 14-16, 2014. (Eds.) Ch. Körner et al. 42nd Aerospace Mechanism Symposium Vol. NASA/CP-2014-217519, Goddard Space Flight Center, Greenbelt, Maryland 20771, 19-30 (2014).
- Kümmel, M., J. Mohr, S. Desai, R. Henderson, J. Koppenhoefer, K. Paech and M. Wetzstein: Testing Photometric Methods in the Euclid Testbed. In Proc. of „Astronomical Data Analysis Software and Systems XXIII“, Waikoloa Beach, Hawaii, USA, 2013. (Eds.) N. Manset, P. Forshay. ASP Conf. Ser. 485, Astronomical Society of the Pacific, San Francisco, CA USA, 513-516 (2014).
- La Massa, S., C. Urry, N. Cappelluti, A. Comastri, E. Glikman, G. Richards, H. Böhringer, S. Murray and F. Civano: Discovering Rare AGN with Stripe 82X. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 111 (2014).
- Le Guillou, C., H.G. Changela, R. Dohmen, T. Müller, A.J. Brearley, C. Vollmer, D. Rogalla and H.-W. Becker: The Valency of Iron in the Silicates of CR Chondrite Matrices: Observations and Experiments. In Proc. of „45th Lunar and Planetary Science Conference“. The Woodlands, USA, 2014. (Eds.) LPI Editorial Board. Proc. Lunar and Planetary Institute Science Conferences 45, Lunar and Planetary Institute, 2052 (2014).
- Lisse, C.M., D.J. Christian, S.J. Wolk, K. Dennerl, M.R. Combi, S.T. Lepri and T.H. Zurbuchen: Chandra X-Ray Observatory Observations of Dynamically New Comet C/2012 S1 (ISON): First Detection of OVI Emission by the HRC-I from an X-Ray Bright Comet. In Proc. of „45th Lunar and Planetary Science Conference“, The Woodlands, USA, 2014. (Eds.) LPI Editorial Board. Proc. Lunar and Planetary Institute Science Conferences 45, Lunar and Planetary Institute, 2065 (2014).
- Liu, Z., A. Merloni, A. Georgakakis, M.-L. Menzel, J. Buchner and K. Nandra: X-ray spectroscopic study of the largest X-ray selected spectroscopic AGN sample in the XMM-XXL north. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 273 (2014).
- Madigan, A.-M., O. Pfuhl, Y. Levin, S. Gillessen, R. Genzel and H.B. Perets: On the origin of young stars at the Galactic center. In Proc. of „IAUS 303: The galactic center: Feeding and feedback in a normal galactic nucleus“, Santa Fe, USA, 2013. (Eds.) L. Sjouwerman, J. Ott, C. Lang. Proc. IAU 303, Cambridge University Press, Cambridge, UK, 238-241 (2014).

- Maggi, P., F. Haberl, M. Sasaki, P. Kavanagh, M. Filipović, L. Bozzetto, S. Points, Y. Chu, R. Gruendl and J. Dickel: New X-ray lights on the supernova remnant population of the Large Magellanic Cloud. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 123 (2014).
- Mancini Pires, A., F. Haberl, V. Zavlin, C. Motch, S. Zane and M. Hohle: The most magnificent of the seven? A candidate spin and spin down for RX J1605.3+3249. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 124 (2014).
- Mantovani, G., K. Nandra and G. Ponti: Relativistic iron K alpha line detection in the Suzaku spectra of IC4329a. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 125 (2014).
- Merloni, A. and A. Bongiorno: The host galaxies of X-ray selected AGN: feeding and feedback. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 135 (2014).
- Miyaji, T., M. Krumpke and H. Brunner: Chandra Observation of the AKARI NEP Deep Field. In Proc. of „IAUS 304: Multiwavelength AGN surveys and studies“, Byurakan, Armenia, 2013. (Eds.) A. Mickaelian, F. Aharonian, D. Sanders. Proc. IAU 304, Cambridge University Press, Cambridge, UK, 244 (2014).
- Müller-Sanchez, F., M. Malkan, E. Hicks and R. Davies: The Role of AGN Feedback in the Evolution of Seyfert Galaxies. In: XIV Latin American Regional IAU Meeting. (Eds.) A. Mateus, J. Gregorio-Hetem, R. Cid Fernandes. Revista Mexicana de Astronomía y Astrofísica (Serie de Conferencias) Vol. 44, Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico, 194 (2014),
- Ngoumou, J., D.A. Hubber, J.E. Dale and A. Burkert: Effects of a Momentum Driven Stellar Wind on the Surrounding ISM. *Astrophysics and Space Science Proceedings* 36, 215 (2014).
- Ntormousi, E., A. Burkert, K. Fierlinger and F. Heitsch: Filamentary Cold Structure from Colliding Supershells. *Astrophysics and Space Science Proceedings* 36, 185 (2014).
- Ntormousi, E., K. Fierlinger, A. Burkert and F. Heitsch: Formation of cold filaments from colliding superbubbles. In Proc. of „IAUS 296: Supernova environmental impacts“, Kolkata, India, 2013. (Eds.) R. McCray, A. Ray. Proc. IAU 296, Cambridge University Press, Cambridge, UK, 282-286 (2014).
- Okada, T., T. Fukuhara, S. Tanaka, ..., T.G. Müller, et al.: Thermal-Infrared Imaging of C-Class Asteroid 162173(1999JU3) by Hayabusa2. In Proc. of „45th Lunar and Planetary Science Conference“. The Woodlands, USA, 2014. (Eds.) LPI Editorial Board. Proc. Lunar and Planetary Institute Science Conferences 45, Lunar and Planetary Institute, 1201 (2014).
- Okamura, N., S. Hasegawa, F. Usui, T. Hiroi, T. Ootsubo, T.G. Müller and S. Sugita: Spectroscopic Observations of Dark Main-Belt Asteroids in the 2.5-3.1 μm Range. In Proc. of „45th Lunar and Planetary Science Conference“. The Woodlands, USA, 2014. (Eds.) LPI Editorial Board. Proc. Lunar and Planetary Institute Science Conferences 45, Lunar and Planetary Institute, 1375 (2014).
- Okamura, N., S. Sugita, S. Kamata, F. Usui, T. Hiroi, T. Ootsubo, T.G. Müller, I. Sakon and S. Hasegawa: Principal-Component Analysis of the Continuous 3- μm Spectra of Low-Albedo Asteroids Observed with the AKARI Satellite. In Proc. of „45th Lunar and Planetary Science Conference“. The Woodlands, USA, 2014. (Eds.) LPI Editorial Board. Proc. Lunar and Planetary Institute Science Conferences 45, Lunar and

- Planetary Institute, 2446 (2014).
- Pinto, C., A. Fabian, J. de Plaa and J. Sanders: Turbulence measurements in clusters of galaxies with XMM-Newton. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 160 (2014).
- Plant, D., R. Fender, G. Ponti, T. Munoz-Darias and M. Coriat: Revealing accretion onto black holes through X-ray reflection. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 161 (2014).
- Ponti, G., M. Morris, F. Haberl, M. Clavel, R. Terrier, R. Sturm, S. Soldi, T. Dwelly, A. Goldwurm and V. Tatischeff: The XMM-Newton view of the Central degree of the Galaxy. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 163 (2014).
- Ponti, G., M.R. Morris, M. Clavel, R. Terrier, A. Goldwurm, S. Soldi, R. Sturm, F. Haberl and K. Nandra: On the past activity of Sgr A*. In Proc. of „IAUS 303: The galactic center: Feeding and feedback in a normal galactic nucleus“, Santa Fe, USA, 2013. (Eds.) L. Sjouwerman, J. Ott, C. Lang. Proc. IAU 303, Cambridge University Press, Cambridge, UK, 333-343 (2014).
- Prinz, T. and W. Becker: Supernova remnant candidates in the ROSAT All-Sky Survey. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 165 (2014).
- Rau, A.: The Wide Field Imager for the Athena X-ray Observatory. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 167 (2014).
- Reinsch, K., I. Traulsen, R. Schwarz and V. Burwitz: X-ray observations of supersoft binaries: Status and perspectives. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 171 (2014).
- Ridl, J. and N. Clerc: Optical and near-infrared follow-up of the XMM Cluster Archive Super Survey (X-CLASS): Preparing for eRosita. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 309 (2014).
- Rovilos, E., I. Georgantopoulos, A. Akylas, J. Aird, D.M. Alexander, A. Comastri, A. Del Moro, P. Gandhi, A. Georgakakis, C.M. Harrison and J.R. Mullaney: A wide search of obscured Active Galactic Nuclei using XMM-Newton and WISE. In Proc. of „IAUS 304: Multiwavelength AGN surveys and studies“, Byurakan, Armenia, 2013. (Eds.) A. Mickaelian, F. Aharonian, D. Sanders. Proc. IAU 304, Cambridge University Press, Cambridge, UK, 245-246 (2014).
- Salvato, M.: Mapping the active Universe with eROSITA. In Proc. of „IAUS 304: Multiwavelength AGN surveys and studies“, Byurakan, Armenia, 2013. (Eds.) A. Mickaelian, F. Aharonian, D. Sanders. Proc. IAU 304, Cambridge University Press, Cambridge, UK, 421-421 (2014).
- Sanders, J. and A. Fabian: MBPROJ: MultiBand X-ray Surface Brightness PROJector applied to the PKS 0745-191 galaxy cluster. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 317 (2014).
- Sasaki, M., P. Kavanagh, G. Warth, F. Haberl, S. Points, M. Filipović and L. Bozzetto:

- Superbubbles in the Large Magellanic Cloud. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 182 (2014).
- Sasaki, M., P.J. Kavanagh, L. Ducci, G. Warth, F. Haberl, P. Maggi, S. Points, M.D. Filipovic and L.M. Bozzetto: Studies of Shock-heated Interstellar Plasma. In Proc. of „Suzaku-MAXI 2014: Expanding the Frontiers of the X-ray Universe“, Ehieme University, Japan, 2014. (Eds.) M. Ishida, R. Petre, K. Mitsuda. Suzaku-MAXI 2014: Expanding the Frontiers of the X-ray Universe, 58 (2014).
- Schartmann, M., A. Burkert, A. Ballone, C. Alig, S. Gillessen, R. Genzel, F. Eisenhauer and T. Fritz: Hydrodynamical simulations of G2 interpreted as a diffuse gas cloud. In Proc. of „IAUS 303: The galactic center: Feeding and feedback in a normal galactic nucleus“, Santa Fe, USA, 2013. (Eds.) L. Sjouwerman, J. Ott, C. Lang. Proc. IAU 303, Cambridge University Press, Cambridge, UK, 324-326 (2014).
- Schwobe, A., I. Traulsen, F. Hessman, B. Thinius, F. Walter, R. Schwarz, K. Reinsch and V. Burwitz: Timing HU Aqr. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 186 (2014).
- Slowikowska, A., G. Kanbach, K. Goździewski, K. Krzeszowski and A. Rau: Review of the ultrafast time resolution photopolarimeters based on SPADs. In Proc. of „IAUS 301: Precision asteroseismology“, Wroclaw, Poland, 2013. (Eds.) W. Chaplin, J. Guzik, G. Handler, A. Pigulski. Proc. IAU 301, Cambridge University Press, Cambridge, UK, 487-488 (2014).
- Snigula, J.M., N. Drory, M. Fabricius, M. Landriau, F. Montesano, G.J. Hill, K. Gebhardt and M.E. Cornell: Cure-WISE: HETDEX Data Reduction with Astro-WISE. In Proc. of „Astronomical Data Analysis Software and Systems XXIII“, Waikoloa Beach, Hawaii, USA, 2013. (Eds.) N. Manset, P. Forshay. ASP Conf. Ser. 485, Astronomical Society of the Pacific, San Francisco, CA USA, 447 (2014).
- Soldi, S., M. Clavel, A. Goldwurm, G. Ponti, R. Terrier, G. Trap, J. Greiner, T. Prinz, A. Rau and M. Servillat: A new very faint X-ray transient in the Galactic center. In Proc. of „IAUS 303: The galactic center: Feeding and feedback in a normal galactic nucleus“, Santa Fe, USA, 2013. (Eds.) L. Sjouwerman, J. Ott, C. Lang. Proc. IAU 303, Cambridge University Press, Cambridge, UK, 126-128 (2014).
- Soldi, S., M. Clavel, A. Goldwurm, M.R. Morris, G. Ponti, R. Terrier and G. Trap: An X-ray survey of the central molecular zone: variability of the $\text{FeK}\alpha_{\pm}$ emission line. In Proc. of „IAUS 303: The galactic center: Feeding and feedback in a normal galactic nucleus“, Santa Fe, USA, 2013. (Eds.) L. Sjouwerman, J. Ott, C. Lang. Proc. IAU 303, Cambridge University Press, Cambridge, UK, 94-96 (2014).
- Sturm, R. and F. Haberl: The diffuse X-ray emission of the Small Magellanic Cloud. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 191 (2014).
- Teng, S., S. Veilleux, D. Rupke, R. Maiolino and E. Sturm: Half-megasecond Chandra Spectral Imaging of the Hot Circumgalactic Nebula around Quasar Markarian 231. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division, Noordwijk, The Netherlands, 325 (2014).
- Whelan, E., P. Kavanagh, M. Sasaki, F. Haberl, P. Maggi, M. Filipović, L. Bozzetto and E. Crawford: XMM-Newton observations of the newly confirmed X-ray supernova remnants 1RXS J053353.6-720404 and [HP99] 1139 in the Large Magellanic Cloud. In Proc. of „The X-Ray Universe 2014“, Dublin, Ireland, 2014. (Eds.) J.-U. Ness, C. Hernandez, A. Pollock. In: The X-ray Universe 2014, ESA Publication Division,

- Noordwijk, The Netherlands, 333 (2014).
- Windpassinger, R., J. Schubert and D. Kampf: Proposed concept and preliminary design for the Sentinel-5 UVNs Spectrometer. In Proc. of „ICSO, International Conference on Space Optics“, Tenerife, Canary Islands, Spain, (2014). ICSO Proceedings published online, <http://www.icsoproceedings.org/> (2014),
- Young, J.S., M.J. Creech-Eakman, C.A. Haniff, D.F. Buscher, M. Schartmann, A. Chiavassa and M. Elvis: Simulated MROI Imaging of AGN Dust Tori and Stellar Surfaces. In Proc. of „Resolving the Future of Astronomy with long-baseline Interferometry“, Socorro, USA, 2011. (Eds.) M.J. Creech-Eakman, J.A. Guzik, R.E. Stencel. ASP Conf. Ser. 487, Astronomical Society of the Pacific, San Francisco, CA USA, 289 (2014).
- van der Marel, N., E.F. van Dishoeck, S. Bruderer, T. Birnstiel, P. Pinilla, C.P. Dullemond, T.A. van Kempen, M. Schmalzl, J.M. Brown, G.J. Herczeg, G.S. Mathews and V. Geers: Planet formation in action: resolved gas and dust images of a transitional disk and its cavity. In Proc. of „IAUS 299: Exploring the formation and evolution of planetary systems“, Victoria, Canada, 2013. (Eds.) B. Matthews, J. Graham. Proc. IAU 299, Cambridge University Press, Cambridge, UK, 90-93 (2014).

8.4 Bücher

- Boller, Th., M. Roth, F. Gonzales, P. Aurora, D. Hadijimichef and C.A. Zen Vasconcello (Eds.): Proc of „Third International Symposium on Strong Electromagnetic Fields and Neutron Stars SMFNS2013“, Varadero, Cuba, 2013. *Astronomische Nachrichten* Vol. 335, Wiley-VCH, Berlin, 1-335 (2014).

8.5 Populärwissenschaftliche und sonstige Veröffentlichungen

- De Breuck, C., R.J. Williams, M. Swinbank, P. Caselli, K. Coppin, T.A. Davis, R. Maiolino, T. Nagao, I. Smail, F. Walter, A. Weißand M.A. Zwaan: ALMA Resolves Turbulent, Rotating [C II] Emission in a Young Starburst Galaxy at $z = 4.8$. *The Messenger* 156, 38-39 (2014).
- Fontana, A., J.S. Dunlop, D. Paris, T. Targett, K. Boutsia, M. Castellano, A. Galametz, A. Grazian, R. McLure, E. Merlin, L. Pentericci, S. Wuyts, O. Almaini, K. Caputi, R.-R. Chary, M. Cirasuolo, C. Conselice, A. Cooray, E. Daddi, M. Dickinson, S.M. Faber, G. Fazio, H. Ferguson, E. Giallongo, M. Giavalisco, N. Grogin, N. Hathi, A. Koekemoer, D.C. Koo, R. Lucas, M. Nonino, H.-W. Rix, A. Renzini, D. Rosario, P. Santini, C. Scarlata, V. Sommariva, D.P. Stark, A. van der Wel, E. Vanzella, V. Wild, H. Yan and S. Zibetti: When VLT meets HST: the HUGS survey. *The Messenger* 155, 42-46 (2014).
- Le Fèvre, O., R. Amorin, S. Bardelli, ..., M. Salvato, et al.: The VIMOS Ultra Deep Survey: 10 000 Galaxies to Study the Early Phases of Galaxy Assembly at $2 < z < 6+$. *The Messenger* 155, 38-41 (2014).

8.6 Vorträge, Astronomische Telegramme und Zirkulare, Poster

Mitarbeiter des MPE hielten im Jahr 2014 insgesamt 306 Vorträge auf Konferenzen, bei Seminaren und Kolloquien und in der Öffentlichkeitsarbeit im In- und Ausland. Zusätzlich haben sie an insgesamt 88 astronomischen Telegrammen, Zirkularen und Datenkatalogen mitgewirkt und 20 Poster als Erstautoren auf Konferenzen präsentiert. Die Zahlen, verteilt auf die einzelnen Arbeitsbereiche, sind in Tabelle 1 gelistet. Die Zahlen in Klammern geben die eingeladenen Vorträge (bei Konferenzen und zu Kolloquien) an, sowie die Zahl der Erstautorschaften bei Telegrammen und Zirkularen.

Die vollständige Liste der Vorträge, der astronomischen Telegramme und Zirkulare sowie der Poster kann auf der MPE Internetseite (<http://www.mpe.mpg.de>) unter dem Punkt

Tabelle 1: Vorträge, Telegramme/Zirkulare und Poster

Arbeitsgruppe	Vorträge	Telegramme, Zirkulare	Poster
Infrarot-/Submillimeter-Astronomie	148 (102))	6 (0)	8
Optische & Interpretative Astronomie	29 (23)	9 (3)	2
Hochenergieastrophysik	103 (57)	72 (29)	5
Zentrum Astrochemische Studien	21 (13)	0 (0)	5
Unabhängige Forschungsgruppen	0 (0)	1 (0)	0

„Forschung/Veröffentlichungen“ eingesehen werden.

9 Öffentlichkeitsarbeit

Das MPE engagierte sich auch in der Öffentlichkeitsarbeit. Im Jahr 2014 hielten MPE-Wissenschaftler 21 populärwissenschaftliche Vorträge (z.B. an Schulen, Planetarien, bei Astronomischen Vereinigungen). Bei 28 Institutsführungen gewannen Gruppen, hauptsächlich Schulklassen von naturwissenschaftlich orientierten Schulen, einen Einblick in das Institut und seine Wissenschaft. Am „Girls' Day“ informierten sich 45 Mädchen über das MPE, 15 Schüler/innen erhielten in ein- oder zweiwöchigen Praktika und 5 Hochschüler in mehrwöchigen Praktika einen Einblick in die Arbeitswelt von Astrophysikern.

Weitere Informationen zur Öffentlichkeitsarbeit sind auf den MPE Webseiten zu finden (<http://www.mpe.mpg.de/>).

Reinhard Genzel