

Garching

Max-Planck-Institut für Astrophysik

Karl-Schwarzschild-Straße 1, Postfach 1317, 85741 Garching,
Tel.: (0 89) 30000-0, Telefax: (0 89) 30000-2235
e-Mail: user@mpa-garching.mpg.de

0 Allgemeines

0.1 Kurzgeschichte

Das Institut für Astrophysik ging hervor aus der gleichnamigen Abteilung am Göttinger MPI für Physik. Mit dem Umzug nach München im Jahre 1958 wurde dieses erweitert zum MPI für Physik und Astrophysik mit Heisenberg und Biermann als Direktoren. Die Arbeiten zur theoretischen Astrophysik lieferten grundlegende Erkenntnisse zur Sonnenphysik, Plasmaphysik und Sternstruktur. 1963 wurde als neues Teilinstitut das Institut für extraterrestrische Physik gegründet. 1991 erfolgte die Aufteilung in drei eigenständige Max-Planck-Institute, das MPI für Physik (MPP), das MPI für Astrophysik (MPA) und das MPI für extraterrestrische Physik (MPE). 2008 feierte das MPA sein 50-jähriges Jubiläum.

1 Personal und Ausstattung

1.1 Personalstand

Direktoren und Professoren:

M. Asplund [-2208], W. Hillebrandt [-2200](Geschäftsführung seit 1.1.2009), R. Sunyaev [-2244], S.D.M. White [-2211](Geschäftsführung bis 31.12.2008).

Sekretariat und Verwaltung:

C. Rickl [Sekr. Geschäftsführung, -2201]

M. Ihle [Verwaltungsleiter, -3600]

Auswärtige Wissenschaftliche Mitglieder:

R. Giacconi, R.-P. Kudritzki, W. Tscharnuter.

Emeritierte Wissenschaftliche Mitglieder:

H. Billing, R. Kippenhahn, F. Meyer, H.U. Schmidt, E. Trefftz.

Wissenschaftliche Mitarbeiter:

R. Angulo (seit 1.10.), A.J. Banday, J. Ballot (bis 30.9.), J. Bolton, M. Boylan-Kolchin, L. Cassagrande (seit 15.9.), B. Catinella, P. Cerda-Duran, A. Chiavassa (seit 1.10.), J. Chluba

(bis 31.10.), B. Ciardi, D. Christlein, E. Churazov, R. Collet, G. De Lucia, N. De la Rosa (bis 31.5.), K. Dolag, T. Enßlin, A. Faltenbacher, D. Gadotti, D. Giannios (bis 14.10.), M. Gilfanov, C. Hernandez-Monteagudo, J. Hu, H.-T. Janka, G. Kauffmann, K. Kifonidis (bis 31.12.), F. Kupka, Ch. Li, L.-X. Li (bis 31.12.), S. Lucatello (seit 1.1.), A. Marek, A. Maselli, P. Mazzali, B. Metcalf, P. Montero (seit 1.9.), E. Müller, M. Obergaulinger (seit 1.2.), R. Overzier, E. Puchwein, I. Ramirez (seit 15.9.), M. Reinecke, M. Revnivtsev (bis 31.7.), H. Ritter, F. Röpke, D. Sauer (bis 31.12.8), S. Sazonov, C. Scannapieco, I. Seitenzahl (seit 1.9.), A. Serenelli (seit 1.9.), F. Shankar (seit 1.11.), S. Sim, V. Springel, H.C. Spruit, S. Taubenberger (seit 1.2.), S. Weinmann, A. Weiss, V. Wild (bis 16.10.), J. Zavala-Franco (seit 1.9.), X.-G. Zhang (bis 30.11.)

Alexander von Humboldt Stipendiaten:

C. Hogan (bis 30.3.), J.-M. Wang (15.9.-17.10.) A. Szalay (20.7.-30.8.)

Minerva Stipendiat

E. Neistein (seit 1.10.)

*Doktoranden:*¹

M. Alves-Cruz*, M. Baldi*, A. Bauswein, R. Birkl, A. Bogdan*, S. Bonoli*, M.-P. Bottino*, M.A. Campisi*, M. Carrasco-Kind*, F. Ciaraldi-Schoolmann (seit 1.12.), C. D'Angelo*, J. Donnert, E. Donoso*, D. Docenko* (bis 31.7.), F. Elsner, S. Fabello* (seit 1.9.), X. Fei* (bis 31.12.), M. Fink, M. Frommert, M. Gabler (seit 1.10.), L. Graziani* (seit 1.9.), M. Grossi*, Q. Guo*, S. Hachinger, N. Hammer, S. Hess, S. Hilbert (bis 30.9.), F. Ianuzzi* (seit 1.9.), J. Jasche, A. Jeesson-Daniel* (seit 1.9.), P. Jofre-Pfeil*, M. Kitzbichler* (bis 30.4.), M. Kromer, T. Mädler, U. Maio*, I. Maurer, F. Miczek (seit 1.11.) S. Mineo*, M. Mocak*, R. Moll, B. Müller, M. Obergaulinger (bis 31.1.), R. Pakmor (seit 1.2.) M. Petkova* (seit 1.3.), M. Pierleoni*, P. Piovezan* (seit 1.9.), L. Porter* (seit 1.9.), M. Righi (bis 31.7.)*, T. Sawala*, V. Silva* (seit 1.9.), F. Stasyszyn*, S. Taubenberger (bis 30.1.), M. Ugliano* (seit 15.10.), M. Vogelsberger, M. Wadepuhl (seit 1.11.), A. Waelkens, L. Wang, J. Wang* (bis 30.7.), A. Wongwathanarat*, F. Zaussinger, Z. Zhang* (seit 1.2.), I. Zhuraleva* (seit 1.9.).

Diplomanden:

C. Auer (seit 1.6.), S. Benitez (seit 1.10.), X. Bian (seit 1.4.), M. Häberlein (seit 1.11.), L. Hüdepohl (seit 14.11.), P. Kuchar (seit 1.10.), M. Petkova (bis 28.2.), M. Wadepuhl (1.1.-30.10.)

Technisches Personal - PLANCK Programmierer:

H.-M. Adorf (bis 31.8.), U. Dörl, W. Hovest, J. Knoche, J. Rachen, T. Riller.

Systemadministratoren:

H.-A. Arnolds, B. Christandl, N. Grüner, H.-W. Paulsen, M. Reuter.

1.2 Personelle Veränderungen

Eugene Churazov: wurde zum Mitglied der Russischen Akademie der Wissenschaften gewählt.

Gabriella De Lucia: erhielt vom Rat der Europäischen Wissenschaften ein Stipendium für eine eigene Nachwuchsgruppe.

Friedrich Kupka: Habilitation an der Fakultät für Physik. TU München. Seit 30. Juni ist er Privatdozent der TU München.

Cheng Li: wurde von der Chinesischen Akademie der Wissenschaften unter die 50 besten Dissertationen 2008 gewählt.

¹*IMPRS (International Max-Planck Research School)

Fritz Röpke: gründete die Emmy Noether Nachwuchsgruppe “Comprehensive Modeling of Type Ia Supernova Explosions”

Rashid Sunyaev: erhielt den “Crafoord Prize 2008” von der Königlichen Schwedischen Akademie der Wissenschaften.

Rashid Sunyaev erhielt den “2008 Henry Norris Russell Prize” der American Astronomical Society

Rashid Sunyaev erhielt die “36ste Karl-Schwarzschild Medaille” der Astronomischen Gesellschaft

Simon White: bekam den “Dirk Brouwer Preis 2008” der American Astronomical Society

Simon White: Oort Professorship 2008, Leiden University

Simon White: erhielt den “2008 Latsis Prize” der Europäischen Wissenschafts Stiftung.

1.3 Gebäude und Bibliothek

Die Bibliothek befindet sich im Astrogebäude und wird von Wissenschaftlern zweier Institute genutzt, das Max-Planck-Institut für Astrophysik und extraterrestrische Physik. Die Bibliothek besitzt aktuell ca. 23.000 Bücher und Konferenzproceedings, sowie Abonnements für 200 wissenschaftliche Zeitschriften. Ein neues System (Edoc-Server) für elektronische Publikationen wurde vor 5 Jahren in der Bibliothek eingeführt.

2 Gäste

Tom Abel (Stanford Univ.) 15.8.–8.9.; Evangelie Athanassoula (LAM/OAMP) 15.05.-15-06.; Jerome Ballot (Toulouse, FR) 30.11.–12.12.; Isabelle Baraffe (ENS, Lyon) 17.11.–17.12.; Altan Baykal (ET Univ. Ankara) 14.7.–29.8.; Sergey Blinnikov (ITEP, Moscow) 1.8.–31.8.; Annalisa Bonafede (Ira, Bologna) 15.9. - 16.12.; Albert Bosma (LAM/OAMP) 15.05.-15-06.; Jonathan Braithwaite (CITA, Canada) 14.7.–15.8.; Matthieu Brassart (IAP, France) bis 30.9.; Alan Brito (Sao Paulo, Brazil) 30.6.–26.7.; Brian Chaboyer (Dartmouth College, NH, USA) 16.6.–27.8.; Gilles Chabrier (ENS, France) 17.11.–17.12.; Yan-Mei Chen (IHEP, Beijing) bis 31.10.; Candace Church (Ucolick, California) 2.6.–28.6.; Paula Coelho (IAP, France) 27.10.–9.11.; Stephane Colomobi (IAP, France) 19.5.–6.6.; Jordan Del Nero (Belem, Brazil) 16.11.–14.12.; Andrey Egorov (Sternberg Inst. Moscow) 15.11.–15.12.; Celine Eminian (Brighton, U.K.) 4.12.–21.12.; Chad Fendt (Univ. of Illinois) 8.7.–24.7.; Ekaterina Filippova (IKI, Moscow) 1.4.–31.5. und 1.10.–30.11.; Rohit Gart (IUCCA, Pune, India) 11.5.–20.7.; Tuhin Gosh (IUCCA, Pune, India) 1.4.–30.6.; Nicolas Grevesse (Univ. de Liege, Belgien) 10.11.–19.12.; Timothy Heckman (JHU, Baltimore) 18.4. –10.5.; Petr Heinzel (Astron. Inst. Ondřejov) 21.4.-2.5.; Zhen Hou (Beijing, China) 1.1.–31.12.; Nail Inogamov (Landau Inst. Moscow) 20.11.–20.12.; Chunyan Jiang (Shanghai Obs.) bis 31.9.; Patrik Jonsson (UC Santa Cruz) 18.9.–17.10.; Anjor Kanekar (Pune, India) 20.5.–25.6.; Dan Kasen (Univ. of California) 22.6.–9.7.; Jasna Krivicic (Padova University, Italy) 1.6.–19.12.; Jounghun Lee (Seoul Nat. Univ. Korea) 27.1.–28.2.; Yang-Shyang Li (Kapteyn Astron. Inst., NL); Shude Mao (Manchester, U.K.) 1.7.–31.8.; Petar Mimica (CITA, Canada) 8.2.–22.2.; Sean Moran (Bloomberg Center, USA) 23.4.–9.5.; Dmitrij Nadyozhin (ITEP, Moscow) 30.7.–25.9.; Poul Erik Nissen (Aarhus, Denmark) 8.9.–26.9.; Kai Noeske (CfA, Harvard) 26.5.–19.6.; Ken'ichi Nomoto (Univ. of Tokyo) 3.8.–22.8.; John Norris (Austr. Nat. Univ. Canberra) 13.7.–27.7.; Sebastian Nuza (IAFE, Argentina) 26.3.–26.9.; Feryal Özel (Univ. of Arizona) 15.6.–29.6.; Josef Paldus (Waterloo, Canada) 1.09.–25.09.; Tiago Pereira (Austr. Nat. Univ. Canberra) 1.11.–4.12.; Konstantin Postnov (Sternberg Inst. Moscow) 15.11.–15.12.; Igor Prokopenko (Space Research Inst., Moscow) 1.2.–31.8.; Dimitrios Psaltis (Univ. of Arizona) 15.6.–29.6.; Alessandro Rettura (JHU Baltimore, USA) 1.5.–31.5.; Kirsty Rhook (Univ. of Cambridge) 1.3.–31.8.; Luke Roberts (Santa Cruz) 12.6.–10.7.; Tokuei Sako (Tokyo, Japan) 6.09.–20.09.; Patrick Scott (Stockholm University) 15.10.–15.11.; Nikolai Shakura (Sternberg Inst. Moscow) 1.9.–30.9.; Shiyin Shen (SHAO,

Shanghai) 1.4.–30.6.; Pavel Shtykovskiy (Space Research Inst., Moscow) 25.4.–24.5.; und 21.10.–19.12.; Michael Specian (JHU, Baltimore) 1.6.–31.8.; Nick Stergioulas (Univ. Thessaloniki, Greece) 10.7.–23.7.; Tamas Szalay (Caltech) 21.7.–19.9.; Victor Utrobin (ITEP, Moscow) 1.10.–30.11.; Jian-Min Wang (ITEP, Beijing) 1.4.–1.6; und 15.9.–15.10.; Jing Wang (USTC, Hefei) seit 1.3.; Stan Woosley (Santa Cruz, USA) 1.6.–9.7.; Shoichi Yamada (Waseda Univ., Japan) 1.4.–30.9.; Tatsuya Yamasaki (CEA, France) seit 2.11.; Sung-Chul Yoon (Ucolick Obs. Santa Cruz) 1.6.–22.6.; Bin Yue (Beijing, China) 18.1.–27.7.; Zhongli Zhang (Shanghai Obs. China) 10.01.–10.05.;

3 Lehrtätigkeit, Prüfungen und Gremientätigkeit

3.1 Lehrtätigkeiten

E. Müller, WS08/09 und SS08, TU München
 W. Hillebrandt, SS08, TU München
 H.-Th. Janka, WS07/08, TU München
 F. Kupka, WS08/09, TU München
 F. Röpke, WS08/09, TU München
 A. Weiss, WS07/08, SS08, und WS08/09, LMU München

3.2 Sonstige Kurz-Vorlesungen

G. De Lucia, “Theoretical scenarios of galaxy formation” (School of Astrophysics ‘Francesco Lucchin’ - Asiago 21.9.–27.9.)
 K. Dolag: “Numerical Simulations”, IAFE Buenos Aires, 24.11–27.11.
 E. Müller: “Core Collapse Supernovae: gravitational wave signature and the influence of magnetic fields” (Erice, 28.6.–4.7.)
 H.-Th. Janka: “Stellar Evolution and Death: Physics and Astrophysics” (Schladming, Austria, 23.2.–1.3.)
 V. Springel: “IMPRS Munich: Advanced Course II” (9.4.–14.4.)
 H. Spruit: “Accretion and jets” (IMPRS, Garching, 1.12.–5.12.)

3.3 Gremientätigkeit

M. Asplund: – Sloan Digital Sky Survey III Collaboration Council – MPP/MPG Berufungskomitee – Uppsala University Astronomer, Bewerbungskomitee
 A. Banday: –Mitglied des Beirats des NASA’s CMB Datenzentrum, the Legacy Archive for Microwave Background Data Analysis (LAMBDA).; – Vorsitzender des Planck Level-S change configuration board (CCB).; – Mitglied des Planck SGS2 End-to-end test review board.; – Planck Koordinator der Technischen Arbeitsgruppe (WT 8) on “Planck and the Virtual Observatory”.
 E. Churazov: Mitglied der INTEGRAL Projektgruppe
 B. Ciardi: Vorsitzende der wissenschaftlichen Arbeitsgruppe von GLOW (German LOng Wavelength) Consortium; – Projektmanagerin für die Entstehung und Platzierung von LO-FAR (Radioteleskop Station am MPA); – Mitglied der wissenschaftlichen Arbeitsgruppe SKA (Square Kilometer Array); – Mitglied des Wissenschaftsrat von INAF (Italian National Institute for Astrophysics)
 T. Enßlin: Projektleiter des MPA Planck Analysis Centre; – Steuerungsausschuss des AstroGrid-D
 M. Gilfanov: Chandra Proposal Review, CfA, Boston, MA

W. Hillebrandt: – Vorsitzender von Supernova Arbeitsgruppe, IAU, Commission VIII; – Vorsitzender, Beirat des Rechenzentrums Garching; – Mitherausgeber, Lecture Notes in Physics; – Mitglied, DFG Senat Komitee on Collaborative Research Centres; – Mitglied des SciDAC Beirats; – Fachbeirat von INAF, Padua und Triest Observatorium

G. Kauffmann: – Mitglied Aspen Center for Physics Board; – Vorsitzende des EARA Beirats; – Astronet, Mitglied von panel für “Galaxienentwicklung”

E. Müller: – Vorstandsmitglied des Sonderforschungsbereichs “Transregio Gravitationswellenastronomie”; – Vorsitzender des Benutzerkomitees und Beirat am Rechenzentrum Garching (RZG/IPP); – Betriebsratsvorsitzender am MPA; – Mitglied des Organisationskomitee der IAU Commission 35

S. Sazonov: Russland Beauftragter für INTEGRAL Time Allocation Committee

H. Spruit: Mitglied des ESO Beobachtungs Proposal Committee; H. Spruit: Mitglieder der Stiftung f. Wissenschaften von Holland (NWO), VICI (Auswahlkomitee)

A. Weiss: Ausschussmitglied vom ESO Beobachtungskomitee

3.4 Dissertationen

Abgeschlossen:

Dmitrijs Docenko: “High Z-Ions in the Hot Astrophysical Plasmas” Ludwig Maximilians Universität München.

Xiang Fei: “Impact of AGN on the gas in clusters of galaxies” Ludwig Maximilians Universität München.

Stephan Hilbert: “Gravitational Lensing with the Millennium Run” Ludwig Maximilians Universität München.

Agis Kitsikis: “Theoretical AGB and post-AGB Stellar Models for Synthetic Population Studies” Ludwig-Maximilians-Universität, München.

Manfred Kitzbichler: “Galaxy Formation Modelling in the Millennium Simulation” Ludwig-Maximilians-Universität, München.

Umberto Maio: “Switching on the first light in the Universe” Ludwig Maximilians Universität München.

Martin Obergaulinger: “Astrophysical magnetohydrodynamics and radiative transfer: numerical methods and applications” Technische Universität München.

Mattia Righi: “Observational consequences of the chemical elements production in the epoch of reionization of the universe” Ludwig-Maximilians-Universität, München.

Stefan Taubenberger: “Interpretation of lightcurves and spectra of Type Ia supernovae.” Technische Universität München.

Jie Wang: “Simulating structure formation with N-body and semi-analytic models”. Ludwig Maximilians Universität München.

Lan Wang: “Building Halo Occupation Distribution Models for comparison with SDSS data” Peking Universität, China.

Laufend:

M. Alves-Cruz: “S-process in extremely metal-poor stars” Ludwig-Maximilians-Universität, München.

M. Baldi: “Interactions between Dark Energy and Dark Matter” Ludwig-Maximilians-Universität, München.

A. Bauswein: “Verschmelzende Neutronensterne und nukleare Zustandsgleichungen und Konsequenzen fuer Elemententstehung” Technische Universität, München.

- A. Bogdan: “Populations of X-ray binaries in nearby galaxies” Ludwig-Maximilians-Universität, München.
- S. Bonoli: “Supermassive Black Holes, Quasars and Galaxy formation” Ludwig-Maximilians-Universität, München.
- P. Bottino: “Component separation methods for Cosmic Microwave Background studies” Ludwig-Maximilians-Universität, München.
- M. A. Campisi: “Gamma-Ray Bursts and Cosmology” Ludwig-Maximilians-Universität, München.
- F. Ciaraldi-Schoolmann: “Stochastische Modellierung von Typ Ia Supernovasimulationen” Technische Universität, München.
- C. D’Angelo: “Investigating ordered magnetic fields in black hole accretion disks”, Ludwig-Maximilians-Universität, München.
- E. Donoso: “Evolution of Radio Galaxies and its Effect on the Galaxy Population” Ludwig-Maximilians-Universität, München.
- F. Elsner: “Search for non-Gaussian signatures in Cosmic Microwave Background” Ludwig-Maximilians-Universität, München.
- M. Fink: “Thermonuclear Detonations in White Dwarfs” Technische Universität, München.
- M. Frommert: “Constraining Cosmological Scenarios” Ludwig-Maximilians-Universität, München.
- M. Gabler: “Coupled core-crust-magnetosphere oscillations of magnetars” Technische Universität, München.
- L. Graziani: “Cosmological Radiative Transfer through metals with CRASH” Ludwig-Maximilians-Universität, München.
- M. Grossi: “Cosmological simulations of non-standard dark energy models as a tool to predict their observational implications”, Ludwig-Maximilians-Universität, München.
- Qi Guo: “Cosmological Semi-Analytical Models” Ludwig-Maximilians-Universität, München.
- S. Hachinger: “Quantitative Analyse von Typ Ia - Supernovaspektren” Technische Universität, München.
- N. Hammer: “Axis-free methods for hydrodynamical simulations using spherical grids” Technische Universität, München.
- S. Hess: “Tesselation Hydrodynamics” Ludwig-Maximilians-Universität, München
- F. Iannuzzi: “Studying the survival of galaxies in hydrodynamical simulations of clusters” Ludwig-Maximilians-Universität, München.
- A. Jeesson-Daniel: “Study of Re-ionization using Ly-alpha emitters” Ludwig-Maximilians-Universität, München.
- P. Jofre-Pfeil: Bestimmung der Eigenschaften galaktischer Sternpopulationen aus dem Sloan Digital Sky survey. Ludwig-Maximilians-Universität, München.
- M. Kromer: “Synthetic spectra and lightcurves of type Ia supernovae”, Technische Universität, München.
- T. Mädler: “Simulation of a Rotating Core Collaps in Characteristic Formulation in General Relativity” Technische Universität, München.
- I. Maurer: “Gamma Ray Bursts and their Super Novae” Technische Universität, München.
- F. Miczek: “Simulation of low Mach number astrophysical flow” Technische Universität, München.
- S. Mineo: “X-ray emission from star-forming galaxies” Ludwig-Maximilians-Universität,

München.

R. Moll: “Magnetic Acceleration of Gamma-Ray Bursts”, Universität Amsterdam.

M. Mocak: “An Investigation of Dynamic Phases of Stellar Evolution” Technische Universität, München.

M. Petkova: “Implementation of radiative transfer into the cosmological simulation code Gadget”, Ludwig-Maximilians-Universität, München.

M. Pierleoni: “Lyalpha/continuum radiative transfer: cosmological applications” Ludwig-Maximilians-Universität, München.

R. Pakmor: “Verschmelzende Weiße Zwerge als Vorläufer von Typ Ia Supernovae” Technische Universität, München.

F. Stasyszyn: “Smoothed particle magneto-hydro-dynamics for cosmological applications” Ludwig-Maximilians-Universität, München.

M. Vogelsberger: “Internal structure of dark matter halos” Ludwig-Maximilians-Universität, München.

M. Wadepuhl: “Simulating the formation of a Milky Way like galaxy” Technische Universität München.

A. Waelkens: “Studying MHD turbulence using radio astronomical tools” Ludwig-Maximilians-Universität, München.

A. Wongwathanarat: “Multidimensional simulations of core collapse supernovae using a two-patch overset grid in spherical coordinates” Technische Universität München.

F. Zaussinger: “Modeling of diffusiv and double-diffusiv convection” Universität Wien.

Z. Zhang: “Populations of Dynamically Formed X-ray Binaries in Globular Clusters and Galactic Centers” Ludwig-Maximilians-Universität, München.

I. Zhuravleva: “Radiative transfer in hot gas of galaxy clusters” Ludwig-Maximilians-Universität, München.

4 Tagungen, Projekte am Institut und Beobachtungszeiten

M. Asplund: Konferenz “A Stellar Journey”, Uppsala, Sweden, June 23.6.-27.6.

M. Asplund: Workshop “Stellar Astrophysics and Galactic Archeology”, Wildbad Kreuth, 27.10.-18.10.

M. Baldi, C. Byrnes, T. Koivisto, et al.: Zweite Transregio Kosmologie Winterschule “Theory for Observers and Observations for Theorists”, 7.12.-12.12.

P. Cerdá-Durán (Hauptorganisator) “CoCoNuT School”, 4.11.-11.11.

E. Churazov and S. Sazonov (SOC), “High Energy Astrophysics 2008”, Moscow, Russia, 24.12-26.12.

B. Ciardi: “Astrophysics with E-LOFAR”, 16.9.-19.9.

B. Ciardi: “Far Away: Light in the young universe at redshift beyond 3”, 7.7.-11.7.

B. Ciardi: “SKADS Marie Curie Conference”, 14.4.-18.4.

T. Foglizzo and H.-Th. Janka, Konferenz “Asymmetric Instabilities in Stellar Core Collapse”, 30.6.-11.7.

C. Hernandez-Monteagudo: Mitorganisator des Workshops “The Physics of Cosmological Recombination”, MPA Garching, 9.7.-11.7.

W. Hillebrandt, E. Müller: Organisatoren des Workshops “Nuclear Astrophysics XIV” Schloß Ringbert, Tegernsee, 10.3.-15.3.

W. Hillebrandt, E. S. Oran: Workshop on Prospects for DDT in Unconfined Terrestrial Systems and Supernovae, SIAM International Conference on Numerical Combustion, Monterey, California, USA, 30.3.–2.4.

G. Kauffmann: “The First Two Billion Years of Galaxy Formation: The Reionization Epoch and Beyond”, Aspen, 11.2.–15.2.

G. Kauffmann: “Aspen Summer workshop: Co-evolution of Black Holes and Galaxies”, Aspen, 7.7.–27.7.

F. Kupka: Mitglied des SOC – IAU Symposium 252 “The Art of Modelling Stars in the 21st century” Sanya, China, 6.4.–11.4.

– Symposium 7 “Grand Challenges in Computational Astrophysics” of JENAM 2008, Vienna, Austria, 8.9.–12.9.,

– the “Workshop on Turbulence and Hydrodynamical Instabilities”, organized in the framework of the German Excellence Cluster “Origin and Structure of the Universe”, Garching, Germany, 17.11.–19.11.

A. Weiss: IAU Symposium 252 “The art of modelling stars in the 21st century”, April 6–11.

A. Weiss: Garching Joint Astronomy Conference 2008 “Chemical Evolution of Dwarf Galaxies and Stellar Clusters”, July 21–25.

4.1 Beobachtungszeiten

L. Casagrande, M. Asplund, J. Meléndez (CAUP), I. Ramírez, S. Sousa (CAUP), 22 hours, VLT, Paranal, Chile, UVES, The metallicity scale at the bottom of the main sequence

L. Casagrande, A. Chiavassa, M. Asplund, J. Meléndez (CAUP), I. Ramírez, 36 hours, TNG, La Palma, Spain, SARG, Towards an accurate metallicity scale for M dwarfs

B. Catinella: 19.3.–10.10. (62 hours divided into 20 blocks over the 7-month period) Arecibo radiotelescope, PR, USA (observations carried out from MPA) Measuring the HI content of massive galaxies (GALEX Arecibo SDSS Survey)

D. Zaritsky, D. Christlein, D. Just, 23.6.–27.6., Magellan II Telescope, Las Campanas Observatory, Chile: “Science with rotating slits: Spectroscopic outer-disk H-alpha emission profiles of disk galaxies“

D. Gadotti (MPA), E. Athanassoula (LAM/OAMP), A. Bosma (LAM/OAMP): 2.10.–6.10., Calar Alto 3.5-m telescope, Granada, Spain, PPAK, Unraveling the Stellar Dynamics in Barred Galaxies;

R. Overzier: 29.01.,30.03.,05.06.,20.09., Apache Point Observatory 3.5m, New Mexico, USA, Optical spectroscopy of starburst galaxies

R. Overzier: 30.11.–31.12., Very Large Telescope, Paranal, Chile, Resolved Ha kinematics of local Lyman break galaxy analogs with FLAMES

F. Patat (ESO), W. Hillebrandt, P. Mazzali et al.: 1.4.2008–31.3.2009, ESO VLT, “Pinning Down the Nature of Type Ia Supernovae Progenitors“ (30h)

N. Przybilla (Bamberg), M.F. Nieva (MPA), M. Farnstein (Bamberg), 21.11.–23.11. 3.5m/TWIN, Calar Alto, Massive Stars as Tracers of the Chemical Evolution of the Galaxy

P. Mazzali, CoIs: Pian, Cappellaro, Patat et al. Title: Late-time spectrophotometry of Type Ib/c Supernovae: diagnostics on energies, asphericities, and progenitors Instrument: ESO VLT FORS Time: 12 hours:

S. Sazonov: 23.07.,3.10.,4.12., INTERNATIONAL Gamma-Ray Astrophysics Laboratory, Gamma-ray burst studies (GRB080723B, GRB081003B, GRB081204);

S. Sazonov: 1.5.–31.12., Spitzer Space Telescope, Testing the unified model with a complete sample of hard X-ray selected AGN;

H. Spruit (MPA), G. Scharmer (Stockholm): 5.7.–17.7., Swedish 1-m Solar Telescope, La

Palma, Magnetic fields of the new solar cycle

D. Zaritsky (ESO), D. Christlein, D. Just, 23.6.-27.6., Magellan II Telescope, Las Campanas Observatory, Chile: “Science with rotating slits: Spectroscopic outer-disk H-alpha emission profiles of disk galaxies”

4.2 Vorträge und Gastaufenthalte

4.3 Übersichtsvorträge

M. Asplund:

- “Nuclear astrophysics” (Ringberg, March 10-14)
- “IAU Symposium 252: The art of modelling stars in the 21st century” (Sanya, China, April 7 -11)
- “Origin of the elements heavier than Fe” (Torino, Italy, Sept. 25-27)
- Invited review, “Isotopic anomalies” (Paris, France, Oct. 16-17)

M. Boylan-Kolchin:

- “The Future of Supercomputing: A German View” (München, 8.9-13.9)

P. Cerdá-Durán:

- “CoCoNuT school” workshop, MPA, Garching, Germany, (04.11-06.11)
- “Whisky Retreat 2008” workshop, Parma, Italy, (07.04-08.04)
- “Numerical modelling of astrophysical sources of gravitational radiation” workshop, Valencia, Spain, (8.09-12.09)

B. Catinella:

- “Pushing Arecibo to the limit: detection of HI emission from galaxies at redshift $z \sim 0.2$ ” (Arecibo, PR, USA, 01.02.-03.02.)
- “HI observations of gas-rich galaxies at redshift $z \sim 0.2$ ” (Socorro, NM, USA, 16.12.-18.12.)

E. Churazov:

- AAS/HEAD meeting, (Austin, USA, 07.01-11.01)
- “Putting Gravity to Work” conference, (Cambridge, UK, 21.07-25.07)

B. Ciardi:

- “XXIVth IAP Colloquium. Far Away: Light in the young universe at redshift beyond 3” (Paris, France, 7.7-11.7)
- “The Impact of Simulations in Cosmology and Galaxy Formation” (Trieste, Italy, 20.10-22.10)
- “Astrophysics with E-LOFAR” (Hamburg, Germany, 16.9-19.9)
- “VLBI and high resolution astronomy in the next decade” (Garching, Germany, 26.6)
- “21cm Cosmology” (Cambridge, USA, 12.5-15.)

G. De Lucia:

- “Probing Stellar Populations out to the Distant Universe”, invited review (Cefalu', Italy, 7.09-19.09)
- National Radio Astronomy Observatory (Socorro, USA, 12.11)

K. Dolag:

- Invited Review at “Magnetic fields in the Universe II”, Cozumel, Mexico
- Invited Review at COSPAR(E13), “Astrophysical Shocks: Space Observ. vs. Modelling”, Montreal, Canada

T. Enßlin:

- “Magnetic fields in the Universe II: From Laboratory and Stars to the Primordial Universe” Conference, (Cozumel, Mexico, 28.01.-01.02)

M. Gilfanov:

- “Cool disks, hot flows” (Fuenasdalen, Sweden, 25.03.-30.03)
- Astronomy Symposium, Crafoord days 2008 (Stockholm, Sweden, 22.04.-23.04.)

- “Ultraviolet Universe” (Moscow, Russia, 19.05.–20.05.)
- “Astrophysics of Neutron Stars” (Istanbul, Turkey, 30.06.-4.07)
- “HEA-2007” (Moscow, Russia, 24.12.-26.12.)

S. Hachinger:

- “SNe Ia: Links between spectral signatures, physics and abundances”, 14th Workshop on “Nuclear Astrophysics”, (Ringberg, 14.3.)
- “Spectroscopic Luminosity Indicators in SNe Ia”, International Astronomy Meeting, (Cefalù, 19.9.)

W. Hillebrandt:

- “Turbulent Flames in Type Ia Supernovae”, SIAM International Conference on Numerical Combustion (Monterey, USA, 30.3.-2.4.)
- “Multidimensional Simulations of Type Ia Supernova Explosions”, 3rd Biennial Leopoldins Conference on “Dark Energy“ (Munich, 17.10.-11.10.)
- “Recent Progress in Type Ia Supernova Modeling and its Implication for Cosmology”, RESCEU Symposium on “Astroparticle Physics and Cosmology” (Tokyo, Japan, 11.11.-14.11.)

H.-Th. Janka:

- “Supernovae, neutrinos and gravitational waves” Workshop, (Cascina, Italy, 26.11.)
- “Fireworks 2008” Workshop, (Tel Aviv, Israel, 14.12.–21.12.)
- “Next Generation Nucleon Decay and Neutrino Detectors (NNN08)” Workshop, (Paris, France, 11.9.–13.9.)
- “2008 APS April Meeting and HEDP/HEDLA Meeting”, (St. Louis, Missouri, 11.4.–15.4.)

G. Kauffmann:

- “The Evolution of Galaxies through the Neutral Hydrogen Window” (Arecibo Observatory, Puerto Rico , 1.2.-3.2.)
- “Galactic Structure and the Structure of Galaxies” (Ensenada, Baja California, Mexico, 17.3.-21.3.)
- “AAS High Energy Astrophysics Division Meeting - HEAD2008” (Los Angeles, California, 31.3.-3.4.)
- “The Sloan Digital Sky Survey: Asteroids to Cosmology” (Chicago, Illinois, 15.8.-18.8.)
- “Galaxies in Real Life and Simulations”, (Lorentz Center, Leiden, 15.9.-19.9.)
- “The Starburst-AGN Connection Conference”, (Shanghai, China, 27.10.-31.10.)

P. Mazzali:

- Properties of SNe Ia“ at the meeting “SN Rates” (Florence, Italy, 19.5.–23.5.).
- “Type Ia SNe and their progenitors” at the meeting “AM CVn Stars” (Cape Town, So. Africa, 1.9.–5.9.).
- “SNe and Gamma-Ray Bursts” at the meeting “High Energy Astrophysics” (Kathmandu, Nepal, 29.9.–3.10).
- “Properties of SNe Ia from the observations” at the meeting Fireworks Weizmann Inst. of Science, (Israel 14.12.–19.12.)

R. Moll:

- “The high-energy astrophysics of outflows from compact objects” Workshop, (Ringberg Castle, 7.12.–13.12.)

M. Obergaulinger:

- Numerical modelling of astrophysical sources of gravitational radiation, (Valencia, 8.9.–12.9.)
- Workshop on Turbulence and Hydrodynamical Instabilities, Excellence Cluster Universe, (Munich 17.11.–19.11.)

H. Ritter:

- Invited review talk at the School of Astrophysics “F. Lucchin”, Advanced Stellar Evolutionary Phases (Tarquinia, Italy, 08.06-14.06)

J. Schaefer:

- “Zero-phonon emission bands of solid hydrogen at 6 - 12 um wavelength: An astrophysical phenomenon” Conference on Cryocrystals and Quantum Crystals 2008 (Wroclaw 31.7.–5.8.)

A. Serenelli:

- The Standard Solar Model. The Physics of the Sun and the Solar Neutrinos: an update, (L’Aquila, Italy, 16.10–17.10.)

V. Springel:

- JENAM 2008, “New challenges to European Astronomy” (Vienna, Austria, 7.-12.9.)
- “Galactic structure and the structure of galaxies” (Ensenada, Mexico, 17.-21.3.)

H. Spruit:

- Invited review, IAU Symposium 259 “Cosmic magnetic fields”, (Tenerife, 3.11.-7.11.)

A. Waelkens:

- “CMB Polarization workshop: theory and foregrounds” Workshop, (Fermilab, Chicago, US, 23.06.-26.06)

A. Weiss:

- “A Stellar Journey” symposium, (Uppsala, Sweden, 23.06.–27.06.)

S. White:

- Invited Discourse, American Astronomical Society, (Austin, Texas, 8.1.-10.1.)
- Surveys & Simulations, (Berkeley, USA, 12.1.-18.1.)
- IPMU Opening Symposium, (Tokyo, Japan, 9.3.-13.3.)

Galactic Structure and the Structure of Galaxies, (Ensenada, Mexico, 15.3.-21.3.)

- SPIE Annual Conference, (Marseille, France, 24.6.-26.6.)
- KIAA Opening Symposium, (Beijing, China, 26.6.-29.6.)
- Putting Gravity to Work, (Cambridge, UK, 21.7.-25.7.)
- SDSS Symposium From Asteroids to Cosmology, (Chicago, 13.8.-20.8.)
- Academia Europea Annual Meeting, (Liverpool, 18.9.-20.9.)
- New Vision 400, Beijing, (China, 11.10.-17.10.)

4.4 Kolloquiums Vorträge

M. Asplund:

- Kolloquium, Geneva Observatory (Geneva, March 4)
- Kolloquium, Leiden University (Leiden, March 6)
- Kolloquium, MPIfR (Bonn, July 4)
- Kolloquium, LMU (Munich, July 7)
- Kolloquium, MPIA/Univ. Heidelberg (Heidelberg, July 8)
- Kolloquium, Australian National University (Canberra, Australia, Aug. 15)
- Kolloquium, Australian National University (Canberra, Australia, Aug. 20)

J.S. Bolton:

- Astrophysics seminar, Department of Physics, UCSB, (Santa Barbara, USA, 15.02.08)

E. Churazov:

- Colloquium at the Institute of High Energy Physics (Protvino, Russia, 02.10)

B. Ciardi:

- “XXIVth IAP Kolloquium Far Away: Light in the young universe at redshift beyond 3” (Paris, France, 7.7–11.7)
- Invited Colloquium (ITA Heidelberg; 22.1)

G. De Lucia:

- Eingeladenes Kolloquium, Osservatorio Astronomico di Brera (Milano, Italy, 26.05)

D. Gadotti:

- Max Planck Institute for Astronomy (Heidelberg, Germany, 16.12.)
- University of Ghent (Ghent, Belgium, 15.7.)

- Institut d’Astrophysique de Paris (Paris, France, 2.7.)
- Max Planck Institute for Astrophysics (Garching, Germany, 16.6.)
- Max Planck Institute for Extraterrestrial Physics (Garching, Germany, 5.6.)

W. Hillebrandt:

- “Viel Lärm um das Nichts - Neues von der dunklen Seite des Universums”, Kolloquium, Research Center Jülich (Juelich, 19.9.)

H.-Th. Janka:

- University Colloquium (Aachen, 28.4.)
- University Colloquium (New York, NY, 17.4.)

R.B. Metcalf:

- Kolloquium, University of St. Andrews, 22.4.
- Kolloquium, Royal Observatory Edinburgh, 23.4.
- Kolloquium, University of Durham, 29.4.

R. Overzier:

- Kolloquium, (Berkeley, USA, 05.02.)
- Kolloquium, (Santiago, Chile, 27.11.)

V. Springel:

- Astrophysikalisches Kolloquium (IAP, Paris, 5.12.)
- Physikerkolloquium (Heidelberg, 24.10.)
- Astrophysikalisches Kolloquium (Harvard-CfA, 30.10.)
- Astrophysikalisches Kolloquium (ARI, Heidelberg, 14.1.)

4.5 Kooperationen

E. Müller und H.-Th. Janka vom MPA sind mit zwei Teilprojekten am Sonderforschungsbereich/Transregio 7, “Gravitationswellenastronomie” beteiligt (Verwaltung des SFB in Jena) Der SFB beschäftigt sich hauptsächlich mit der theoretischen Modellierung der kosmischen Quellen der Gravitationsstrahlung, der Verbesserung des Detektorenkonzeptes und der Auswertung der zu erwartenden Gravitationswellensignale. (Beteiligte Institute: Univ. Hannover, Univ. Tübingen, Univ. Jena)

H.-Th. Janka hat in dem neuen Neutrino-Sonderforschungsbereich (TR27) ein Teilprojekt. Der SFB wird vom Physik-Department der TU München verwaltet. Beteiligte Institute sind: Univ. Karlsruhe, Univ. Tübingen, MPI f. Physik München, MPI f. Kernphysik Heidelberg. Nach den jüngsten Erfolgen in der Neutrinophysik greift dieser SFB zentrale Themen, sowohl im Experiment als auch in der Theorie auf.

S. White und W. Hillebrandt sind in dem Transregio TR33 “Dunkles Universum” mit Teilprojekten involviert. Beteiligte Institute sind: Univ. Heidelberg, Univ. Bonn und Ludwig-Maximilians-Univ. München.

A. Asplund, W. Hillebrandt, S. White u.v.m. Excellence Cluster Universe - Origin and Structure of the Universe - Beteiligte Institute: Ludwig-Maximilians-Univ. München, Technische Univ. München, ESO sowie die Max-Planck Institute f. Astrophysik, extraterrestrische Physik, Plasmaphysik, Halbleiterlabor Neuperlach

4.6 EU Netzwerke - 2008 aktiv:

- “Planck Surveyor” (S. White);
- Early Stage Training Site (Marie Curie Program) in the European Association for research in Astronomy (EARA). (S. White, H. Spruit)
- Joint Research Activity High Time Resolution Astronomy in the Optical-Infrared Coordination Network for Astronomy in OPTICON II(FP6 I3 Program) (H. Spruit)
- “Multi-wavelength Analysis of Galaxy Populations (MAGPOP)”, – (G. Kauffmann)
- “Marie Curie Site at the IMPRS in Astrophysics (International Max-Planck Research School) S. White.

4.7 Andere Netzwerke

“Alfa-Lenac” Latein-Amerikanisch-Europäisches Netzwerk für Astrophysik und Kosmologie (S. White)

IKYDA - DAAD Projektbezogener Personenaustausch mit Griechenland (E. Müller)

G.I.F. Forschungsaustausch mit Israel (S. White)

PROALAR (DAAD Programm mit Argentinien) - S. White

4.8 Sonstige Reisen

M. Asplund: Australian National University, Canberra (Aug. 7-29)

J.S. Bolton: University of Melbourne, Australia (16.11.07- 21.01.08.)

J.S. Bolton: Kavli Institute for Theoretical Physics, Santa Barbara, USA (05.02.08 - 26.02.08)

S. Bonoli: Canadian Institute for Theoretical Astrophysics. Toronto (01.05.08–04.06.08)

E. Churazov: Space Research Institute, Moscow (09.05.–03.06.,01.08.–20.08).

R. Collet: Niels Bohr Institute, University of Copenhagen, (19.05–31.05)

G. De Lucia: Kavli Institute for Theoretical Physics, Santa Barbara, USA (27.10–21.11)

F. Elsner: University of Illinois at Urbana-Champaign, (10.03.–08.04.).

M.Gilfanov: Space Research Institute, Moskau (12.09.–26.09.)

E. Müller: Univ. Tokyo, Japan (24.04.–24.05.).

G. Kauffmann: Aspen Center for Physics, Colorado (02.07.–27.07.).

W. Kraemer: Steacie Institute for Molecular Sciences, NRCC, Ottawa (25.3.-26.4.2008).

W. Kraemer: Center for Complex Systems, Academy of Sciences, Prague (3.11.-22.11.2008).

P. Mazzali: Research Centre for the Early Universe, Univ. of Tokyo Visting Professor, 1.1.–31.3.

P. Mazzali: Dark Cosmology Centre, U. Copenhagen, Denmark, june

P. Mazzali: Weizmann Inst of Science, Israel, dec: 2 weeks, talk.

I. Seitzzahl: University of Chicago, (3.10.–19.10.)

H. Spruit: Astronomy department, Pontificia Universidad Catolica de Chile, Santiago (14.1.–6.2).

F. Zaussinger: 1st MetStröm Summer School on multiscale problems in fluid dynamics and meteorology at the FU Berlin (18.8.-12.9.)

5 Veröffentlichungen

5.1 In Zeitschriften und Büchern

Adelman-McCarthy, K. Jennifer, et al. (incl. S. White): The sixth data release of the sloan digital sky survey. *Astrophys. J. Suppl.* **175**, 297–313 (2008).

Amendola, L., M. Baldi und C. Wetterich: Quintessence cosmologies with a growing matter component. *Phys. Review D* **78**, No. 023015 (2008).

Anzer, U., und P. Heinzel: Prominence modelling: from observed emission measures to temperature profiles. *Astron. und Astrophys.* **480**, 537–542 (2008).

Appourchaux, T., E. Michel et al. (incl. J. Ballot): CoRoT sounds the stars: p-mode parameters of Sun-like oscillations on HD 49933. *Astron. und Astrophys.* **488**, 705–714 (2008).

- Arcones, A., G. Martinez-Pinedo et al. (incl. H.-Th. Janka): Influence of light nuclei on neutrino-driven supernova outflows. *Phys. Review C* **78**, No. 015806 (2008).
- Asplund, M.: The shining make-up of our star. *Science* **322**, 51–52 (2008).
- Asplund, M.: A stellar journey. *Physica Scripta*, **133**, 011002-011003 (2008)
- Ballot, J., T. Appourchaux, T. Toutain und M. Guittet: On deriving p-mode parameters for inclined solar-like stars. *Astron. Astrophys.* **486**, 867–875 (2008).
- Barbuy, B. et al. (incl. M. Asplund): Abundances in the Galactic bulge. *Physica Scripta*, **133**, 014032-014036 (2008)
- Barreiro, R.B., P. Vielva, C. Hernandez-Monteagudo und E. Martinez-Gonzalez: A Linear Filter to Reconstruct the ISW Effect From CMB and LSS Observations. *IEEE J. of Selected Topics in Signal Processing*, **2**, 747–754 (2008).
- Bergemann, M.: NLTE analysis of Mn and Co in metal-poor stars: *Physica Scripta* **T133** 014013-7pp (2008).
- Bertone, S., J. Schaye und K. Dolag: Numerical simulations of the warm-hot intergalactic medium *Space Science Reviews* **134**, 295–310 (2008).
- Bikmaev, I.F., et al. (incl. M. Revnivtsev, S. Sazonov und R. Sunyaev): Optical identifications of five INTEGRAL hard X-ray sources in the galactic plane. *Astron. Lett.* **34**, 653–663 (2008).
- Bogdan, A. und M. Gilfanov: Unresolved emission and ionized gas in the bulge of M31. *Mon. Not. R. Astron. Soc.* **388**, 56–66 (2008).
- Bolton, J., M. Viel, T. Kim et al.: Possible evidence for an inverted temperature density relation in the intergalactic medium from the flux distribution of the Ly alpha forest. *Mon. Not. R. Astron. Soc.* **386**, 1131–1144 (2008).
- Borgani, S., D. Fabjan et al. (incl. K. Dolag): The chemical enrichment of the ICM from hydrodynamical simulations *Space Science Review* **134**, 379–403 (2008).
- Borgani, S., A. Diaferio, K. Dolag und S. Schindler: Thermodynamical properties of the ICM from hydrodynamical simulations. *Space Science Review* **134**, 269–293 (2008).
- Botticella, M., M. Riello et al. (incl. S. Taubenberger): Supernova rates from the Southern in Termediate Redshift ESO Supernova Search (STRESS). *Astron. and Astrophys.* **479**, 49–66 (2008).
- Brüggen, M. und G. De Lucia: Ram-pressure histories of cluster galaxies. *Mon. Not. R. Astron. Soc.* **383**, 1336–1342 (2008).
- Budavari, T., und A. Szalay: Probabilistic cross-identification of astronomical sources. *Astrophys. J.* **679**, 301–309 (2008).
- Burenin, R., et al. (incl. M. Revnivtsev, S. Sazonov und R. Sunyaev): New active galactic nuclei among the INTEGRAL and SWIFT X-ray sources. *Astron. Lett.* **34**, 367–374 (2008).
- Burwitz, V., et al. (incl. E. Meyer-Hofmeister, F. Meyer): Variability in the cycle length of the supersoft source RX J0513.9-6951. *Astron. and Astrophys.* **481**, 193–198 (2008).
- Bykov, A., K. Dolag und F. Durret: Cosmological shock waves. *Space Science Review* **134**, 119–140 (2008).
- Campisi, M.-A. und L.-X. Li: Probability for chance coincidence of a gamma-ray burst with a galaxy on the sky *Mon. Not. R. Astron. Soc.* **391**, 935–941 (2008).
- Carbone, C., V. Springel, C. Baccigalupi et al.: Full-sky maps for gravitational lensing of the cosmic microwave background. *Mon. Not. R. Astron. Soc.* **388**, 1618–1626 (2008).
- Cassisi, S., M. Salaris, A. Pietrinferni et al.: The double subgiant branch of NGC 1851: the role of the CNO abundance. *Astrophys. J.* **672**, L115–L118 (2008).

- Catinella, B., M.P. Haynes, R. Giovanelli et al.: A Pilot Survey of HI in Field Galaxies at Redshift z 0.2 *Astrophys. J.* **685**, L13–L17 (2008).
- Cerda-Duran, P., J.A. Font und E. Müller: A new general relativistic magnetohydrodynamics code for dynamical spacetimes. *Astron. and Astrophys.* **492**, 937–953 (2008).
- Chluba, J., und R. Sunyaev: Is there a need and another way to measure the cosmic microwave background temperature more accurately? *Astron. and Astrophys. Lett.* **478**, L27–L30 (2008).
- Chluba, J., und R. Sunyaev: Two-photon transitions in hydrogen and cosmological recombination. *Astron. and Astrophys.* **480**, 629–645 (2008).
- Chluba, J., und R. Sunyaev: Evolution of low-frequency features in the CMB spectrum due to stimulated Compton scattering and Doppler broadening. *Astron. und Astrophys.* **488**, 861–865 (2008).
- Christlein, D., und D. Zaritsky: The kinematic properties of the extended disks of spiral galaxies: a sample of edge-on galaxies. *Astrophys. J.* **680**, 1053–1071 (2008).
- Churazov, E., W. Forman, A. Vikhlinin et al.: Measuring the non-thermal pressure in early-type galaxy atmospheres: a comparison of X-ray and optical potential profiles in M87 and NGC 1399. *Mon. Not. R. Astron. Soc.* **388**, 1062–1078 (2008).
- Churazov, E., S. Sazonov, R. Sunyaev und M. Revnivtsev: Earth X-ray albedo for cosmic X-ray background radiation in the 1000 keV band. *Mon. Not. R. Astron. Soc.* **385**, 719–727 (2008).
- Cora, S., L. Tornatore, P. Tozzi und K. Dolag: On the dynamical origin of the ICM metallicity evolution. *Mon. Not. R. Astron. Soc.* **386**, 96–104 (2008).
- Cortese, L, R. Minchin, et al. (incl. B. Catinella): The arecibo galaxy environment survey II. A HI view of the Abell cluster 1367 and its outskirts. *Mon. Not. R. Astron. Soc.* **383**, 1519–1537 (2008).
- Cuadra, J., S. Nayakshin und F. Martins: Variable accretion and emission from the stellar winds in the galactic centre. *Mon. Not. R. Astron. Soc.* **383**, 458–466 (2008).
- Cui, W., L. Liu, et al. (incl. V. Springel): An ideal mass assignment scheme for measuring the power spectrum with fast Fourier transforms. *Astrophys. J.* **687**, 738–744 (2008).
- D’Angelo, C., D. Giannios, C. Dullemond et al.: Soft X-ray components in the hard state of accreting black holes *Astron. und Astrophys.* **488**, 441–450 (2008).
- De Lucia, G. und A. Helmi: The galaxy and its stellar halo: insights on their formation from a hybrid cosmological approach. *Mon. Not. R. Astron. Soc.* **391**, 14–31 (2008).
- Di Matteo, T., J. Colberg, V. Springel et al.: Direct cosmological simulations of the growth of black holes and galaxies. *Astrophys. J.* **676**, 33–53 (2008).
- Diaferio, A., S. Schindler und K. Dolag: Clusters of galaxies: setting the stage. *Space Science Review.* **134**, 7–24 (2008).
- Dimmelmeier, H., C. Ott, A. Marek und H.-Th. Janka: Gravitational wave burst signal from core collapse of rotating stars. *Phys. Review D* **78** 064056 (2008).
- Docenko, D. und R. Sunyaev: Optical and near-infrared recombination lines of oxygen ions from Cassiopeia A knots. *Astron. and Astrophys.* **484**, 755–771 (2008).
- Dolag, K., A. Bykov und A. Diaferio: Non-thermal processes in cosmological simulations. *Space Science Review.* **134**, 311–335 (2008).
- Dolag, K., S. Borgani, S. Schindler et al.: Simulation techniques for cosmological simulations. *Space Science Review* **134**, 229–268 (2008).
- Dolag K., M. Reinecke, C. Gheller und S. Imboden: Splotch: visualizing cosmological simulations. *New Journal of Physics* **10**, No. 125006 (2008).

- Durret, F., J. Kaastra, et al. (incl. N. Werner): Soft X-ray and extreme ultraviolet excess emission from clusters of galaxies. *Space Science Review* **134**, 51–70 (2008).
- Elia-Rosa, N., S. Benetti, et al. (incl. W. Hillebrandt): SN 2002cv: a heavily obscured type Ia supernova. *Mon. Not. R. Astron. Soc.* **384**, 107–122 (2008).
- Elsner, F., G. Feulner und U. Hopp: The impact of Spitzer infrared data on stellar mass estimates - and a revised galaxy stellar mass function at $0 < z < 5$. *Astron. and Astrophys.* **477**, 503–512 (2008).
- Eminian, C., G. Kauffmann, S. Charlot et al.: Physical interpretation of the near-infrared colours of low-redshift galaxies. *Mon. Not. R. Astron. Soc. Lett.* **384**, 930–942 (2008).
- Eriksen, H., C. Dickinson, et al. (incl. A. J. Banday): The joint large-scale foreground-CMB posteriors of the 3 year WMAP data. *Astrophys. J.* **672**, L87–L90 (2008).
- Eriksen, H., J. Jewell, et al. (incl. A. J. Banday): Joint Bayesian component separation and CMB power spectrum estimation. *Astrophys. J.* **676**, 10–32 (2008).
- Evrard, A., et al. (incl. V. Springel und S. White): Virial scaling of massive dark matter halos: why clusters prefer a high normalization cosmology. *Astrophys. J.* **672**, 122–137 (2008).
- Fabjan, D., L. Tornatore, et al. (incl. K. Dolag): Evolution of the metal content of the intracluster medium with hydrodynamical simulations. *Mon. Not. R. Astron. Soc. Lett.* **386**, 1265–1273 (2008).
- Faltenbacher, A., Y.P. Jing, Ch. Li et al. Spatial and kinematic alignments between central and satellite halos. *Astrophys. J.* **675**, 146–155 (2008).
- Ferguson, J.W., A. Heffner-Wong, J.J. Penley et al.: Grain physics and Rosseland mean opacities. *Astrophys. J.* **666**, 261–266 (2007).
- Filippova, E., M. Revnivtsev und A. Lutovinov: Diagnostics of the early explosion phase of a classical nova using its X-ray emission: a model for the X-ray outburst of CI Camelopardalis in 1998. *Astron. Lett.* **34**, 797–819 (2008).
- Finoguenov, A., M. Ruszkowski, C. Jones et al.: In-depth Chandra study of the AGN feedback in Virgo elliptical galaxy M84. *Astrophys. J.* **686**, 911–917 (2008).
- Frebel, A., R. Collet, K. Eriksson et al.: HE 1327-2326, an unevolved star with $[\text{Fe}/\text{H}] < -5.0$. - II. New 3D-1D corrected abundances from a Very Large Telescope UVES spectrum. *Astrophys. J.* **684**, 588–602 (2008).
- Frommert, M. T. Ensslin und F. Kitaura: Optimal integrated Sachs-Wolfe detection and joint likelihood for cosmological parameter estimation. *Mon. Not. R. Astron. Soc. Lett.* **391**, 1315–1326 (2008).
- Gadotti, D.A.: Image decomposition of barred galaxies und AGN hosts *Mon. Not. R. Astron. Soc. Lett.* **384**, 420–439 (2008).
- Gallazzi, A., J. Brinchmann, S. Charlot und S. White: A census of metals and baryons in stars in the local Universe. *Mon. Not. R. Astron. Soc. Lett.* **383**, 1439–1458 (2008).
- Gandhi, P., K. Makishima et al. (incl. H. Spruit): Rapid optical and X-ray timing observations of GX 339-4: flux correlations at the onset of a low/hard state. *Mon. Not. R. Astron. Soc. Lett.* **390**, L29–L33 (2008).
- Gao, L., et al. (incl. V. Springel und S. White): The redshift dependence of the structure of massive cold dark matter haloes. *Mon. Not. R. Astron. Soc.* **387**, 536–544 (2008).
- Garcia R., und J. Ballot: On the backwards difference filter. *Astron. and Astrophys.* **477**, 611–613 (2008).
- Garcia Perez, A.E. et al. (incl. M. Asplund): A new sample of extremely/ultra metal-poor stars. *Physica Scripta*, **133**, 014036-014039 (2008).

- Giannios, D.: Powerful GeV emission from a X-ray-burst shock wave scattering stellar photons. *Astron. and Astrophys. Lett.* **488**, L55–L58 (2008).
- Giannios, D.: Prompt GRB emission from gradual energy dissipation. *Astron. and Astrophys.* **480**, 305–312 (2008).
- Giannios, D., P. Mimica und M. Aloy: On the existence of a reverse shock in magnetized gamma-ray burst ejecta. *Astron. and Astrophys.* **478**, 747–753 (2008).
- Grossi, M., E. Branchini, K. Dolag et al.: The mass density field in simulated non-Gaussian scenarios. *Mon. Not. R. Astron. Soc.* **390**, 438–446 (2008).
- Gunar, S., P. Heinzel, U. Anzer und B. Schmieder: On Lyman-line asymmetries in quiescent prominences. *Astron. and Astrophys.* **490**, 307–313 (2008).
- Guo, Q. und S. White: Galaxy growth in the concordance Lambda-CDM cosmology. *Mon. Not. R. Astron. Soc.* **384**, 2–10 (2008).
- Guzzo, L., M. Pierleoni, B. Meneux et al.: A test of the nature of cosmic acceleration using galaxy redshift distortions. *Nature* **451**, 541–544 (2008).
- Hachinger, S., P. Mazzali, M. Tanaka et al.: Spectral luminosity indicators in type Ia supernovae - understanding the R(Si II) line-strength ratio and beyond. *Mon. Not. R. Astron. Soc.* **389**, 1087–1096 (2008).
- Harutyunyan, A., P. Pfahler et al. (incl. S. Taubenberger): ESC supernova spectroscopy of non-ESC targets. *Astron. and Astrophys.* **488**, 383–399 (2008).
- Hayashi, E. und S. White: Understanding the halo-mass and galaxy-mass cross-correlation functions. *Mon. Not. R. Astron. Soc.* **388**, 2–14 (2008).
- Heinz, S., H.J. Grimm, R. Sunyaev und R. Fender: Blazing trails: microquasars as head-tail sources and the seeding of magnetized plasma into the ISM. *Astrophys. J.* **686**, 1145–1154 (2008).
- Heinzel, P., B. Schmieder et al. (incl. U. Anzer): Hinode, TRACE, SOHO, and ground-based observations of a quiescent prominence. *Astrophys. J.* **686**, 1383–1396 (2008).
- Hernandez-Monteagudo, C.: Missing baryons, bulk flows, and the E-mode polarization of the cosmic microwave background. *Astron. and Astrophys.* **490**, 15–23 (2008).
- Hikage, C., P. Coles, M. Grossi et al.: The effect of primordial non-Gaussianity on the topology of large-scale structure. *Mon. Not. R. Astron. Soc.* **385**, 1613–1620 (2008).
- Hernandez-Monteagudo, C.: Implementation of a Fourier matched filter in CMB analyses. Application to ISW studies *Astron. and Astrophys.* **490**, 15–23 (2008).
- Hilbert, S., S. White, J. Hartlap und P. Schneider: Strong-lensing optical depths in a CDM universe - II. The influence of the stellar mass in galaxies. *Mon. Not. R. Astron. Soc.* **386**, 1845–1854 (2008).
- Heng, K. und R. Sunyaev: Broad Ly alpha emission from supernova remnants in young galaxies. *Astron. and Astrophys.* **481**, 117–122 (2008).
- Heng, K., F. Haberl, B. Aschenbach und G. Hasinger: Probing elemental abundances in SNR 1987A using XMM-Newton. *Astrophys. J.*, **676**, 361–370 (2008).
- Hoffman, R., B. Müller und H.-Th. Janka. Nucleosynthesis in O-Ne-Mg supernovae. *Astrophys. J. Lett.* **676**, L127–L130 (2008).
- Hu, J.: The black hole mass-stellar velocity dispersion correlation: bulges versus pseudo-bulges. *Mon. Not. R. Astron. Soc.* **386**, 2242–2252 (2008).
- Hu, J. und Y.-Q. Lou: Collisional interaction limits between dark matter particles and baryons in ‘cooling flow’ clusters. *Mon. Not. R. Astron. Soc.* **384**, 814–820 (2008).
- Huffenberger, K., H. Erikson, et al. (incl. A. Banday): The scalar perturbation spectral index ns: WMAP sensitivity to unresolved point sources. *Astrophys. J.* **688**, 1–11

- (2008).
- Immler, S., M. Modjaz, et al. (incl. P. Mazzali): Swift and Chandra detections of supernova 2006jc: evidence for interaction of the supernova shock with a circumstellar shell. *Astrophys. J.* **674**, L85–L88 (2008).
- Iwakami, W., K. Kotake, et al. (incl. S. Yamada): Three-dimensional simulations of standing accretion shock instability in core-collapse supernovae. *Astrophys. J.* **678**, 1207–1222 (2008).
- Janka, H.-Th., B. Müller, F. Kitaura und R. Buras: Dynamics of shock propagation and nucleosynthesis conditions in O-Ne-Mg core supernovae. *Astron. and Astrophys.* **485**, 199–208 (2008).
- Jelic, V., S. Zaroubi, et al. (incl. B. Ciardi): Foreground simulations for the LOFAR-epoch of reionization experiment. *Mon. Not. R. Astron. Soc.* **389**, 1319–1335 (2008).
- Jubelgas, M., V. Springel, T. Ensslin und C. Pfrommer: Cosmic ray feedback in hydrodynamical simulations of galaxy formation. *Astron. and Astrophys.* **482**, 33–63 (2008).
- Kasliwal, M., et al. (incl. R. Krivonos und R. Sunyaev): GRB 070610: a curious galactic transient. *Astrophys. J.* **678**, 1127–1135 (2008).
- Kauffmann, G., T. Heckman und Ph. Best: Radio jets in galaxies with actively accreting black holes: new insights from the SDSS. *Mon. Not. R. Astron. Soc.* **384**, 953–971 (2008).
- Kitaura, F. und T. Ensslin: Bayesian reconstruction of the cosmological large-scale structure: methodology, inverse algorithms and numerical optimization. *Mon. Not. R. Astron. Soc.* **389**, 497–544 (2008).
- Kitzbichler, M. und S. White: A calibration of the relation between the abundance of close galaxy pairs and the rate of galaxy mergers. *Mon. Not. R. Astron. Soc.* **391**, 1489–1498 (2008).
- Kiuchi, K. und K. Kotake: Equilibrium configurations of strongly magnetized neutron stars with realistic equations of state. *Mon. Not. R. Astron. Soc.* **385**, 1327–1347 (2008).
- Kunder, A., P. Popowski, K. Cook und B. Chaboyer: The extinction toward the galactic bulge from RR Lyrae stars. *Astron. J.* **135**, 631–636 (2008).
- Kylafis, N.D., I.E. Papadakis, et al. (incl. D. Giannos): A jet model for galactic black-hole X-ray sources: some constraining correlations. *Astron. and Astrophys.* **489**, 481–487 (2008).
- Langanke, K., et al. (incl. B. Müller, H.-Th. Janka und A. Marek): Effects of inelastic neutrino-nucleus scattering on supernova dynamics and radiated neutrino spectra. *Phys. Review Lett.* **100**, No. 011101 (2008).
- Lebreton, Y., J. Montalban, et al. (incl. A. Weiss): CoRoT/ESTA-TASK 1 and TASK 3 comparison of the internal structure and seismic properties of representative stellar models - comparisons between the ASTEC, CESAM, CLES, GARSTEC and STAROX codes. *Astrophys. and Space Science* **316**, 187–213 (2008).
- Lee, J., V. Springel, U.-L. Pen und G. Lemson: Quantifying the cosmic web - I. The large-scale halo ellipticity-ellipticity and ellipticity-direction correlations. *Mon. Not. R. Astron. Soc.* **389**, 1266–1274 (2008).
- Li, L.-X.: Are gamma-ray bursts a standard energy reservoir? *Acta Astronomica* **58**, 103–112 (2008).
- Li, L.-X.: The X-ray transient 080109 in NGC 2770: an X-ray flash associated with a normal core-collapse supernova. *Mon. Not. R. Astron. Soc.* **388**, 603–610 (2008).
- Li, L.-X.: Star formation history up to $z = 7.4$: implications for gamma-ray bursts and cosmic metallicity evolution. *Mon. Not. R. Astron. Soc.* **388**, 1487–1500 (2008).

- Li, Y.X., P. Hopkins, et al. (incl. V. Springel): Modeling the dust properties of $z \sim 6$ quasars with ART2-all-wavelength radiative transfer with adaptive refinement tree. *Astrophys. J.* **678**, 41–63 (2008).
- Li, Ch., G. Kauffmann, T. Heckman et al.: Interactions, star formation and AGN activity. *Mon. Not. R. Astron. Soc.* **385**, 1915–1922 (2008).
- Li, Ch., G. Kauffmann, T. Heckman et al.: Interaction-induced star formation in a complete sample of 105 nearby star-forming galaxies. *Mon. Not. R. Astron. Soc.* **385**, 1903–1914 (2008).
- Li, Y.-Sh., und S. White: Masses for the local group and the Milky Way. *Mon. Not. R. Astron. Soc.* **384**, 1459–1468 (2008).
- Littlefair, S.P., V.S. Dhillon, et al. (incl. I. Baraffe): On the evolutionary status of short-period cataclysmic variables. *Mon. Not. R. Astron. Soc.* **388**, 1582–1594 (2008).
- Liu, F.K., F. Meyer, E. Meyer-Hofmeister und V. Burwitz: Low heat conduction in white dwarf boundary layers? *Astron. and Astrophys.* **483**, 231 – 237 (2008).
- Lunardini, C., B. Müller und H.-Th. Janka: Neutrino oscillation signatures of oxygen-neon-magnesium supernovae. *Phys. Review D* **78**, No. 023016 (2008).
- Lutovinov, A., et al. (incl. E. Churazov und R. Sunyaev): X-Ray observations of the coma cluster in a broad energy band with the INTEGRAL, RXTE, and ROSAT observatories. *Astrophys. J.* **687**, 968–975 (2008).
- Maeda, K., et al. (incl. P. Mazzali und S. Taubenberger): Asphericity in supernova explosions from late-time spectroscopy. *Science* **319**, 1220–1223 (2008).
- Margutti, R., A. Moretti, et al. (incl. P. Mazzali): Anomalous X-ray emission in GRB 060904B: a nickel line? *Astron. and Astrophys.* **480**, 677–685 (2008).
- Maschietto, F. N., A. Hatch, et al. (incl. R. Overzier): [O III] emitters in the field of the MRC 0316-257 protocluster. *Mon. Not. R. Astron. Soc.* **389**, 1223–1232 (2008).
- Maurer, I. und A. Watts: Ignition latitude and the shape of type I X-ray bursts. *Mon. Not. R. Astron. Soc.* **383**, 387–398 (2008).
- Mazzali, P., D. Sauer, A. Pastorello et al.: Abundance stratification in type Ia supernovae - II. The rapidly declining, spectroscopically normal SN 2004eo. *Mon. Not. R. Astron. Soc.* **386**, 1897–1906 (2008).
- Mazzali, P., et al. (incl. D. Sauer und S. Taubenberger): The metamorphosis of supernova SN 2008D/XRF 080109: a link between supernovae and GRBs/hypernovae. *Science* **321**, 1185–1188 (2008).
- Melendez, J. und M. Asplund: Another forbidden solar oxygen abundance: the [OI] 5577 Å line. *Astron. and Astrophys.* **490**, 817–821 (2008).
- Melendez, J., M. Asplund, A. Alves-Brito et al.: Chemical similarities between galactic bulge and local thick disk red giant stars. *Astron. and Astrophys.* **484**, L21–L25 (2008).
- Meneghetti, M., P. Melchior et al. (incl. K. Dolag): Realistic simulations of gravitational lensing by galaxy clusters: extracting arc parameters from mock images. *Astron. and Astrophys.* **482**, 403–412 (2008).
- Meneux, B., L. Guzzo, et al. (incl. G. De Lucia): The VIMOS-VLT Deep Survey (VVDS): the dependence of clustering on galaxy stellar mass at $z \sim 1$. *Astron. and Astrophys.* **478**, 299–310 (2008).
- Michel, E., A. Baglin, et al. (incl. J. Ballot): CoRoT measures solar-like oscillations and granulation in stars hotter than the Sun. *Science* **322**, 558–560 (2008).
- Miller Bertolami, M., L. Althaus, K. Unglaub und A. Weiss: Modeling He-rich subdwarfs through the hot-flasher scenario *Astron. and Astrophys.* **491**, 253–265 (2008).

- Mocak, M., E. Müller, A. Weiss und K. Kifonidis: The core helium flash revisited - I. One and two-dimensional hydrodynamic simulations. *Astron. and Astrophys.* **490**, 265–277 (2008).
- Moll, R., H. Spruit und M. Obergaulinger: Kink instabilities in jets from rotating magnetic fields. *Astron. and Astrophys.* **492**, 621–630 (2008).
- Müller, B., H. Dimmellemeier und E. Müller: Exploring the relativistic regime with Newtonian hydrodynamics - II. An effective gravitational potential for rapid rotation. *Astron. and Astrophys.* **489**, 301–314 (2008).
- Nestor, D., M. Pettini, et al. (incl. V. Wild): Measurements of Ca II absorption, metals and dust in a sample of $z \simeq 1$ DLAs and subDLAs. *Mon. Not. R. Astron. Soc.* **390**, 1670–1682 (2008).
- Nozawa, T., T. Kozasa, et al. (incl. K. Maeda): Early formation of dust in the ejecta of type Ib SN 2006jc and temperature and mass of the dust. *Astrophys. J.* **684**, 1343–1350 (2008).
- Overzier, R., T. Heckmann, G. Kauffmann et al.: Hubble space telescope morphologies of local Lyman break galaxy analogs - I. Evidence for starbursts triggered by merging. *Astrophys. J.* **677**, 37–62 (2008).
- Pace, F., M. Maturi, et al. (incl. K. Dolag): Statistical properties of SZ and X-ray cluster detections. *Astron. and Astrophys.* **483**, 389–400 (2008).
- Pakmor, R., F. Röpke, A. Weiss und W. Hillebrandt: The impact of type Ia supernovae on main sequence binary companions. *Astron. and Astrophys.* **489**, 943–951 (2008).
- Pastorello, A., et al. (incl. P. Mazzali und S. Taubenberger): Massive stars exploding in a He-rich circumstellar medium I. Type Ibn (SN 2006jc-like) events. *Mon. Not. R. Astron. Soc.* **389**, 113–130 (2008).
- Paz, D.J., F. Stasyszyn und N. Padilla: Angular momentum-large-scale structure alignments in CDM models and the SDSS. *Mon. Not. R. Astron. Soc.* **389**, 1127–1136 (2008).
- Pfrommer, C., T. Ensslin und V. Springel: Simulating cosmic rays in clusters of galaxies - II. A unified scheme for radio haloes and relics with predictions of the X-ray emission. *Mon. Not. R. Astron. Soc.* **385**, 1211–1241 (2008).
- Pierleoni, M., E. Branchini und M. Viel: The relation between Lyman alpha absorbers and gas-rich galaxies in the local universe. *Mon. Not. R. Astron. Soc.* **388**, 282–292 (2008).
- Pignata, G. et al. (incl. P. Mazzali und W. Hillebrandt): Optical and infrared observations of SN 2002dj: some possible common properties of fast-expanding type Ia supernovae. *Mon. Not. R. Astron. Soc.* **388**, 971–990 (2008).
- Podsiadlowski, P., P. Mazzali, P. Lesaffre et al.: The nuclear diversity of Type Ia supernova explosions *New AR* **52** 381–385 (2008).
- Poggianti, B., et al. (incl. G. De Lucia und S. White): The relation between star formation, morphology, and local density in high-redshift clusters and groups. *Astrophys. J.* **684**, 888–904 (2008).
- Puchwein, E. D. Sijacki und V. Springel: Simulations of AGN Feedback in Galaxy Clusters and Groups: Impact on Gas = Fractions and the L_X -T Scaling Relation. *Astrophys. J.* **687**, L53–L56 (2008).
- Przybilla, N., F. Nieva, U. Heber und K. Butler: HD 271791: an extreme supernova runaway B star escaping from the galaxy. *Astrophys. J. Lett.* **684**, L103–L106 (2008).
- Przybilla, N., F. Nieva und K. Butler: A Cosmic Abundance Standard: Chemical Homogeneity of the Solar Neighborhood and the ISM Dust-Phase Compositio. *Astrophys. J.* **688**, L103–L106 (2008).

- Ramirez, I., P.C. Allende und D. Lambert: Granulation in K-type dwarf stars - I. Spectroscopic observations. *Astron. and Astrophys.* **492**, 841–855 (2008).
- Rasia, E., P. Mazzotta, H. Bourdin et al.: X-MAS2: study systematics on the ICM metallicity measurements. *Astrophys. J.* **674**, 728–741 (2008).
- Rebusco, P., E. Churazov, R. Sunyaev et al.: Width of X-ray lines as a diagnostic of gas motions in cooling flows. *Mon. Not. R. Astron. Soc.* **384**, 1511–1518 (2008).
- Reichard, T., T. Heckman, et al. (incl. G. Kauffmann): The lopsidedness of present-day galaxies: results from the sloan digital sky survey. *Astrophys. J.* **677**, 186–200 (2008).
- Revnivtsev, M., S. Molkov und S. Sazonov: Large-scale variations of the cosmic X-ray background and the X-ray emissivity of the local Universe. *Astron. and Astrophys.* **483**, 425–435 (2008).
- Revnivtsev, M., E. Churazov, S. Sazonov et al.: Universal X-ray emissivity of the stellar population in early-type galaxies: unresolved X-ray sources in NGC 3379. *Astron. and Astrophys.* **490**, 37–43 (2008).
- Revnivtsev, M., S. Sazonov, R. Krivonos et al.: Properties of the galactic population of cataclysmic variables in hard X-rays. *Astron. and Astrophys.* **489**, 1121–1127 (2008).
- Revnivtsev, M., A. Lutovinov, E. Churazov et al.: Low-mass X-ray binaries in the bulge of the Milky Way. *Astron. and Astrophys.* **491**, 209–217 (2008).
- Righi, M., C. Hernandez-Monteagudo und R. Sunyaev: The clustering of merging star-forming haloes: dust emission as high frequency arcminute CMB foreground. *Astron. and Astrophys.* **478**, 685–700 (2008).
- Righi, M., C. Hernandez-Monteagudo und R. Sunyaev: Carbon monoxide line emission as a CMB foreground: tomography of the star-forming universe with different spectral resolutions. *Astron. and Astrophys.* **489**, 489–504 (2008).
- Roepke, F. und R. Bruckschen: Thermonuclear supernovae: a multi-scale astrophysical problem challenging numerical simulations and visualization. *New Journal of Physics* **10**, No. 125009 (2008).
- Rubino-Martin, J., J. Chluba und S. Sunyaev: Lines in the cosmic microwave background spectrum from the epoch of cosmological helium recombination. *Astron. and Astrophys.* **485**, 377–393 (2008).
- Ruszkowski, M., T. Ensslin, M. Brüggen et al.: Cosmic ray confinement in fossil cluster bubbles. *Mon. Not. R. Astron. Soc.* **383**, 1359–1365 (2008).
- Sahu, D., M. Tanaka, G. Anupama et al.: The evolution of the peculiar type Ia supernova SN 2005hk over 400 days. *Astrophys. J.*, **680**, 580–592 (2008).
- Sako, T. und G. Dierksen: Understanding the spectra of a few electrons confined in a quasi-one-dimensional nanostructure. *Journal of Physics: Condensed Matter* **20**, 1–13 (2008).
- Salter, C.J., T. Ghosh, B. Catinella et al.: The Arecibo Arp 220 Spectral Census I: Discovery of the Pre-Biotic Molecule Methanimine and New Cm-wavelength Transitions of Other Molecules *Astron. J.* **136**, 389–399 (2008).
- Samadi, R., K. Belkacem, M. Goupil et al.: Modeling the excitation of acoustic modes in Centauri A. *Astron. and Astrophys.* **489**, 291–299 (2008).
- Sanders, C.B., T. Senden und V. Springel: Focus on visualization in physics. *New Journal of Physics* **10**, No. 125001 (2008).
- Saro, A., G. De Lucia, K. Dolag und S. Borgani: The effect of gas dynamics on semi-analytic modelling of cluster galaxies. *Mon. Not. R. Astron. Soc.* **391**, 565–576 (2008).
- Sauer, D., P. Mazzali, S. Blondin et al.: Properties of the ultraviolet flux of type Ia supernovae: an analysis with synthetic spectra of SN 2001ep and SN 2001eh. *Mon. Not. R.*

- Astron. Soc. **391**, 1605–1618 (2008).
- Sauer, D. und P. Mazzali: Interpretation of observed type Ia supernova spectra with radiative transfer models. *New AR* **53**, 370–372 (2008)
- Sawai, H., K. Kotake und S. Yamada: Numerical simulations of equatorially asymmetric magnetized supernovae: formation of magnetars and their kicks. *Astrophys. J.* **672**, 465–478 (2008).
- Sazonov, S., R. Krivonos, M. Revnivtsev et al.: Cumulative hard X-ray spectrum of local AGN: a link to the cosmic X-ray background. *Astron. Astrophys.* **482**, 517–527 (2008).
- Sazonov, S., M. Revnivtsev, R. Burenin et al.: Discovery of heavily-obscured AGN among seven INTEGRAL hard X-ray sources observed by Chandra. *Astron. and Astrophys.* **487**, 509–517 (2008).
- Scannapieco, C., P. Tissera, S. White und V. Springel: Effects of supernova feedback on the formation of galaxy discs. *Mon. Not. R. Astron. Soc.* **389**, 1137–1149 (2008).
- Scheck, L., H.-Th. Janka, T. Foglizzo und K. Kifonidis: Multidimensional supernova simulations with approximative neutrino transport - II. Convection and the advective-acoustic cycle in the supernova core. *Astron. and Astrophys.* **477**, 931–952 (2008).
- Schuler, S., St. Marghelm, T. Sivarani et al.: Carbon abundances of three carbon-enhanced metal-poor stars from high-resolution Gemini-S/bHROS spectra of the 8727 [C I] line. *Astron. J.* **136**, 2244–2258 (2008).
- Shen, S., G. Kauffmann, A. von der Linden et al.: Radio-loud active galactic nuclei and the LX-relation of galaxy groups and clusters. *Mon. Not. R. Astron. Soc.* **389**, 1074–1086 (2008).
- Sijacki, D., C. Pfrommer, V. Springel und T. Ensslin: Simulations of cosmic-ray feedback by active galactic nuclei in galaxy clusters. *Mon. Not. R. Astron. Soc.* **387**, 1403–1415 (2008).
- Silva Aguirre, V., M. Catelan, A. Weiss und A. Valcarce: Stellar evolution and variability in the pre-ZAHB phase. *Astron. and Astrophys.* **489**, 1201–1208 (2008).
- Sim, S., und P. Mazzali: On the X-ray emission of type Ia supernovae. *Mon. Not. R. Astron. Soc.* **385**, 1681–1690 (2008).
- Sim, S.A, K. Long, L. Miller und T.J. Turner: Multidimensional modelling of X-ray spectra for AGN accretion disc outflows *Mon. Not. R. Astron. Soc.* **388**, 611–624 (2008).
- Simionescu, A., N. Werner, A. Finoguenov et al. Metal-rich multi-phase gas in M 87 - AGN-driven metal transport, magnetic-field supported multi-temperature gas, and constraints on non-thermal emission observed with XMM-Newton. *Astron. and Astrophys.* **482**, 97–112 (2008).
- Smiljanic, R., L. Pasquini, F. Primas et al.: Possible signature of hypernova nucleosynthesis in a beryllium-rich halo dwarf. *Mon. Not. R. Astron. Soc.* **385**, L93–L97 (2008).
- Smolcic, V., E. Schinnerer, M. Scodreggio et al.: A new method to separate star-forming from AGN galaxies at intermediate redshift: the submillijansky radio population in the VLA-COSMOS survey. *Astrophys. J. Suppl.* **177**, 14–38 (2008).
- Soderberg, A., E. Berger, K. Page et al.: An extremely luminous X-ray outburst at the birth of a supernova. *Nature* **453**, 469–474 (2008).
- Spirko, V., O. Bludsky und W. Kraemer: Energies and electric dipole moments of the bound vibrational states of HN^2 and DN^2 . *Collection of Czechoslovak Chem. Comm.* **73** 873–897 (2008).
- Springel, V., J. Wang, M. Vogelsberger et al.: The Aquarius project: the subhaloes of galactic haloes. *Mon. Not. R. Astron. Soc.* **391**, 1685–1711 (2008).
- Springel, V., S. White, C. Frenk et al.: Prospects for detecting supersymmetric dark matter

- in the galactic halo *Nature* **456** 73–76 (2008).
- Sun, X.H., W. Reich, A. Waelkens und T. Ensslin: Radio observational constraints on Galactic 3D-emission models. *Astron. and Astrophys.* **477**, 573–592 (2008).
- Surman, R., G. McLaughlin, M. Ruffert et al.: R-process nucleosynthesis in hot accretion disk flows from black hole-neutron star mergers. *Astrophys J.* **679**, L117–L120 (2008).
- Taam, R., B.F. Liu, F. Meyer und E. Meyer-Hofmeister: On the properties of inner cool disks in the hard state of black hole X-ray transient systems. *Astrophys. J.* **688**, 527–536 (2008).
- Tanaka, M., P. Mazzali, S. Benetti et al.: The outermost ejecta of type Ia supernovae. *Astrophys. J.* **677**, 448–460 (2008).
- Taubenberger, S., S. Hachinger, G. Pignata et al.: The underluminous type Ia supernova 2005bl and the class of objects similar to SN 1991bg. *Mon. Not. R. Astron. Soc.* **385**, 75–96 (2008).
- Temporin, S. A. Iovino, M. Bolzonella et al.: The VIMOS VLT deep survey - The K-band follow-up in the 0226-04 field. *Astron. and Astrophys.* **482**, 81–95 (2008).
- Tominaga, N., M. Limongi, T. Suzuki et al. The peculiar type Ib supernova 2006jc: a WCO Wolf-Rayet star explosion. *Astrophys. J.* **687**, 1208–1219 (2008).
- Török, G., M. Abramowicz, P. Bakala et al. Distribution of kilohertz QPO frequencies and their ratios in the atoll source 4U 1636-53. *Acta Astronomica* **58**, 15–21 (2008).
- Utrobin, V. und N. Chugai: Progenitor mass of the type IIP supernova 2005cs *Astron. and Astrophys.* **491**, 507–513 (2008).
- Valenti, S., N. Elias-Rosa, S. Taubenberger et al.: The Carbon-rich type Ic SN 2007gr: the photospheric phase *Astrophys. J. Lett.* **673**, L155–L158 (2008).
- Valenti, S., S. Benetti, E. Cappellaro et al.: The broad-lined type Ic supernova 2003jd. *Mon. Not. R. Astron. Soc.* **383**, 1485–1500 (2008).
- Vergani, D., M. Scodreggio, L. Pozzetti et al.: The VIMOS VLT deep survey: tracing the galaxy stellar mass assembly history over the last 8 Gyr. *Astron. Astrophys.* **487**, 89–101 (2008).
- Viel, M., G. Becker, J. Bolton et al.: How cold is cold dark matter? Small-scales constraints from the flux power spectrum of the high-redshift Lyman-alpha forest. *Phys. Review Lett.* **100**, No. 041304 (2008).
- Villar-Martin, M. A. Humphrey, A. Martinez-Sansigre et al.: Emission-line activity in type 2 quasars from the sloan digital sky survey. *Mon. Not. R. Astron. Soc.* **390**, 218–226 (2008).
- Vogelsberger M., S. White, A. Helmi und V. Springel: The fine-grained phase-space structure of cold dark matter haloes. *Mon. Not. R. Astron. Soc.* **385**, 236–254 (2008).
- Waelkens, A., M. Maturi und T. Ensslin: Camouflaged galactic cosmic microwave background polarization foregrounds: total and polarized contributions of the kinetic Sunyaev-Zeldovich effect. *Mon. Not. R. Astron. Soc.* **383**, 1425–1430 (2008).
- Wang, J., G. De Lucia, M. Kitzbichler und S. White: The dependence of galaxy formation on cosmological parameters: can we distinguish between the WMAP1 and WMAP3 parameter sets? *Mon. Not. R. Astron. Soc.* **384**, 1301–1315 (2008).
- Wang, Y.G., X.H. Yang, H.J. Mo et al.: Probing the intrinsic shape and alignment of dark matter haloes using SDSS galaxy groups. *Mon. Not. R. Astron. Soc.* **385**, 1511–1522 (2008).
- Wang, Y., X. Yang, H.J. Mo et al.: The clustering of SDSS galaxy groups: mass and color dependence *Astrophys. J.* **687**, 919–935 (2008).

- Wang, L., und G. Kauffmann: Why are AGN found in high-mass galaxies? *Mon. Not. R. Astron. Soc.* **391**, 785–792 (2008).
- Watts A., B. Krishnan, L. Bildsten et al.: Detecting gravitational wave emission from the known accreting neutron stars. *Mon. Not. R. Astron. Soc.* **389**, 839–868 (2008).
- Wegmann, R. und M. Nasser: The Riemann-Hilbert problem and the generalized Neumann kernel on multiply connected regions. *J. of Comp. and Appl. Math.* **214**, 36–57 (2008).
- Weiss, A. und H. Schlattl: GARSTEC—the Garching Stellar Evolution Code - The direct descendant of the legendary Kippenhahn code. *Astrophys. and Space Science* **316**, 99–106 (2008).
- Weratschnig, J., M. Gitti, S. Schindler and K. Dolag: The complex galaxy cluster Abell 514: New results obtained with the XMM-Newton satellite. *Astron. Astrophys.* **490**, 537–545 (2008).
- Werner, N., F. Durret, T. Ohashi et al.: Observations of metals in the intra-cluster medium. *Space Science Review* **134**, 337–362 (2008).
- Whiley, I., A. Aragon-Salamanca, G. De Lucia et al: The evolution of the brightest cluster galaxies since $z \sim 1$ from the ESO Distant Cluster Survey (EDisCS). *Mon. Not. R. Astron. Soc.* **387**, 1253–1263 (2008).
- Wild, V., G. Kauffmann, S. White et al.: Narrow associated quasi-stellar object absorbers: clustering, outflows and the line-of-sight proximity effect. *Mon. Not. R. Astron. Soc.* **388**, 227–241 (2008).
- Wyithe, J., J. Bolton und M. Haehnelt: Reionization bias in high-redshift quasar near-zones. *Mon. Not. R. Astron. Soc.* **383**, 691–704 (2008).
- Yong, D., F. Grundahl, J. Johnson und M. Asplund: Nitrogen abundances in giant stars of the globular cluster NGC 6752 *Astrophys. J.* **684**, 1159–1169 (2008).
- Zackrisson, E., T. Riehm, O. Möller et al.: Strong lensing by subhalos in the dwarf galaxy mass range - I. Image separations. *Astrophys. J.* **684**, 804–810 (2008).
- Zhang, X.-G., D. Duitzin und T.G. Wang: The correlation between spectral index and accretion rate for AGN *Mon. Not. R. Astron. Soc.* **385**, 1087–1094 (2008).
- Zirm, A., S. Stanford, M. Postman et al.: The nascent red sequence at $z \sim 2$ *Astrophys. J.*, **680**, 224–231 (2008).

5.2 Konferenzbeiträge

- Asplund, M.: Does the sun have a subsolar metallicity? In: *Proc. The art of modelling stars in the 21st century IAU Symposium and Colloquium Proc.* **252**, Cambridge University Press 2008. 13–26.
- Asplund, M. und J. Melendez: Primordial and pre-galactic origins of the Lithium isotopes. In: *Proc. First Stars III* **990**, AIP Conference Proceedings, Melville NY, USA 2008, 342–346.
- Aubert, D., A. Amara und B. Metcalf: Smooth particle lensing. In: *From Dark Halos to Light., XL1st Rencontres de Moriond - XXVIth Astrophysics Moriond Meeting*. The Gioi Publ., Vietnam 2008, 421–422.
- Ballot, J., T. Appourchaux, und T. Toutain: Effect of the stellar inclination angle upon theoretical errors of $l = 1$ p-mode parameters. In: *European-Helio-and-Asteroseismology-Network Workshop on Low Degree and Low Frequency Modes*. *Astronomische Nachrichten* **329**, 2008, 558–561.
- Barret, D., T. Belloni, S. Bhattacharya et al.: Science with the XEUS high time resolution spectrometer. In: *Space Telescopes and Instrumentation 2008 - Ultraviolet to Gamma Ray*. SPIE Proc. Series **7011**, Soc. of Photo-Optical Instr. Engineers, Bellingham, USA 2008, 70110E, 1–10.

- Battaglia, N., C. Pfrommer, J. Sievers et al.: In: Exploring the Magnetized Cosmic Web through Low Frequency Radio Emission =20 37th COSPAR Scientific Assembly **37**, 209–217.
- Campisi, M.-A.: Probability for a gamma-ray burst to be coincident with a galaxy on the sky. In: Gamma-Ray Bursts 2007: Proceedings of the Santa Fe Conference, 68–71.
- Catinella, B.: Pushing Arecibo to the limit: detection of HI emission from galaxies at redshift $z \sim 0.2$. In: Proc. The Evolution of Galaxies through the Neutral Hydrogen Window AIP Conf. Proc. **1035**, Melville, NY, USA 2008, 186–189.
- Catinella, B., D. Schiminovich und G. Kauffmann: The GALEX Arecibo SDSS Survey (GASS). In: Proc. The Evolution of Galaxies through the Neutral Hydrogen Window AIP Conf. Proc. **1035**, Melville, NY, USA 2008, 252–255.
- Chaplin, W., T. Appourchaux, T. Arentoft et al. AsteroFLAG: first results from hare-and-hounds exercise No.1 In: European-Helio-and-Asteroseismology-Network Workshop on Low Degree and Low Frequency Modes. *Astronomische Nachrichten* **329**, 2008, 549–557.
- Christlein, D. und D. Zaritsky: The outer banks of the island universes: a spectroscopic perspective. In: Proc. Formation and Evolution of Galaxy Disks ASP Conf. Series **396**, Astron. Soc. of the Pacific San Francisco, USA 2008, 193–196.
- Ciardi, B.: Epoch of reionization In: Proc. First MCCT-SKADS Training School., SISSA Trieste, 2008, 1–18.
- Ciardi, B.: Feedback from the first stars and galaxies and its influence on structure formation. In: Proc. First Stars III **990**, AIP Conference Proceedings, Melville NY, USA 2008, 353–363.
- D’Angelo, C., D. Giannios, C. Dullemond und H. Spruit: Soft X-ray components in the hard state of accreting black holes. In: Proc. VII Microquasar Workshop: Microquasars and Beyond. Proc. of Science **010**, SISSA Italy, 2008, 1–10.
- Da Silva, L., L. Girardi, L. Pasquini et al.: Si and Ca abundances of a selected sample of evolved stars. In: Proc. Precision Spectroscopy in Astrophysics. Series: ESO Astrophysics Symposia, Springer Verlag, Berlin 2008, 273–274.
- den Herder, J.W, R. Kelley, D. McCammon et al.: The Spektr-RG X-ray calorimeter. In: Space Telescopes and Instrumentation 2008 - Ultraviolet to Gamma Ray. SPIE Proc. Series **7011**, Soc. of Photo-Optical Instr. Engineers, Bellingham, USA 2008, 70110K, 1–11.
- Djorgovski, S., M. Volonteri, V. Springel et al.: The origins and the early evolution of quasars and supermassive black holes. In: Proc. The Eleventh Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Gravitation and Relativistic Field Theories. World Scientific Publ. Singapore 2008, 340–367.
- Docenko, D. und R.A. Sunyaev: The ^{14}N VII 5.6-mm line for studies of WHIM, QSO and hot ISM. In: From Planets to Dark Energy: the Modern Radio Universe. Proceedings of Science, PoS(MRU)090.
- Freudling, W., B. Catinella, M. Calabretta et al.: The ALFA Ultra Deep Survey (AUDS). In: Proc. The Evolution of Galaxies through the Neutral Hydrogen Window AIP Conf. Proc. **1035**, Melville, NY, USA 2008, 242–245.
- Gadotti, D.A.: The structural parameters of bulges, bars and discs in the local universe. In: Formation and Evolution of Galaxy Bulges. IAU Symposium and Colloquium Proc. **245**, Cambridge University Press 2008. 117–120.
- Garcia, R., S. Mathur und J. Ballot: Can we constrain solar interior physics by studying the gravity-mode asymptotic signature? In: International Conference on Helioseismology,

- Asteroseismology and MHD Connections (HELAS II). *Solar Physics* **251**, Göttingen 2008, 135–147.
- Garcia, R., S. Mathur, J. Ballot et al.: Influence of low-degree high-order p-mode splittings on the solar rotation profile. In: International Conference on Helioseismology, Asteroseismology and MHD Connections (HELAS II). *Solar Physics* **251**, Göttingen 2008, 119–133.
- Garcia, R. A., A. Jimenez, S. Mathur et al. Update on g-mode research. In: Proc. of the Conference European-Helio-and-Asteroseismology-Network Workshop on Low Degree and Low. *Astronomische Nachrichten* **329**, 2008, 476–484.
- Greiner, J.: GRIPS-gamma-ray burst investigation via polarimetry and spectroscopy. In: *Gamma-Ray Bursts 2007: Proceedings of the Santa Fe Conference 2008*, 620–623.
- Janka, H.-Th., A. Marek, B. Müller und L. Scheck: Supernova explosions and the birth of neutron stars. In: Proc. 40 Years of Pulsars: Millisecond Pulsars, Magnetars and More. Series: AIP Conference Proceedings **983**, Melville NY, USA 369–378.
- Heinis, S., B. Millard, S. Arnouts et al.: The clustering properties of restframe UV selected galaxies derived from GALEX-SDSS UV and CFHTLS u' observations. In: *From Dark Halos to Light.*, The Gioi Publ, Vietnam 2008, 323–327.
- Henning, P.A., C.M. Springob, F. Day et al.: The ALFA Zone of Avoidance Survey. In: Proc. The Evolution of Galaxies through the Neutral Hydrogen Window AIP Conf. Proc. **1035**, Melville, NY, USA 2008, 246–248.
- Hillebrandt, W. und F.K. Röpke: Type Ia Supernovae and Cosmology. In: *Relativistic Astrophys. Legacy and Cosmology - Einstein's ESO Astrophysics Symposia*, Proceedings of the MPE/USM/MPA/ESO Joint Astronomy Conference Held in Munich, Germany, 7-11 November 2005, Eds. Aschenbach, B., V. Burwitz, G. Hasinger und B. Leibundgut. Springer Verlag Heidelberg. p. 21.
- Hillebrandt, W., B. Schmidt et al. (incl. P. Mazzali): Division VIII / Working Group Supernova. In: *Transactions IAU, Volume 4, Issue 27A, Reports on Astronomy 2006-2009*. Ed. K. van der Hucht. Cambridge: Cambridge University Press, 2008, p. 295-297.
- Kanbach, G., A. Stefanescu, S. Duscha et al.: OPTIMA: a high time resolution optical photo-polarimeter. In: Proc. High Time Resolution Astrophysics. Serie: Astrophysics and Space Science Library **351**, Springer Verlag, Dordrecht 2008, 153–169.
- Kasen, D., R. C. Thomas, F. K. Röpke, und S. E. Woosley: Multidimensional radiative transfer calculations of the light curves and spectra of Type Ia supernovae. *Journal of Physics: Conference Series* 125, 2008, 012007
- Kippenhahn, R.: Als die Computer die Astronomie eroberten. In: Proc. Cosmic Matter, *Reviews in Modern Astronomy* **20**, Wiley-VCH Weinheim 2008, 1–14.
- Kitsikis, A. und A. Weiss: Influence of new AGB mass loss rates on stellar models. In: Proc. Mass Loss from Stars and the Evolution of Stellar Clusters. ASP Conf. Series **388**, San Francisco, CA, USA 2008, 183–184.
- Kupka, F.: Shear driven turbulence and coherent structures in solar surface simulations In: Proc. The art of modelling stars in the 21st century IAU Symposium and Colloquium Proc. **252**, Cambridge University Press 2008. 451–461.
- Kupka, F. und H.J. Muthsam: Analysing the contributions in moment equations of Reynolds stress models of convection with numerical simulations. In: Proc. The art of modelling stars in the 21st century IAU Symposium and Colloquium Proc. **252**, Cambridge University Press 2008. 463–464.
- Li, L.-X.: The GRB-supernova connection. In: 2008 Nanjing Gamma-Ray Burst Conference. AIP Conference Proc. **1065**, American Inst. of Phys. Melville, NY, USA 2008, 273–278.

- Liu, B.F., R. Taam, F. Meyer und E. Meyer-Hofmeister: The existence of inner cool disks in the low hard state of accreting black holes. In: Proc. Astrophysics of Compact Objects. Series: AIP Conference Proceedings **968**, Melville, NY, USA 2008, 318–321.
- Maeda, K.: Supernovae in three-dimension: a link to gamma-ray bursts. In: Chinese Journal of Astronomy and Astrophysics 7th International Workshop on Multifrequency Behaviour of High Energy Cosmic Sources - Frascati Workshop 2007, Vol **8** 2008, 361–365.
- Maio, U., B. Ciardi, K. Dolag und L. Tornatore: Cooling in primordial structure formation. In: Proc. First Stars III **990**, AIP Conference Proceedings, Melville NY, USA 2008, 33–35.
- Marek, A., K. Kifonidis, H.-Th. Janka und B. Müller: The superN-project: current progress in modelling core collapse supernovae Proceedings: High Performance Computing in Science and Engineering '07. Springer Berlin 2008, 3-17.
- Mazzali, P., K. Nomoto, K. Maeda et al. The progenitors of type I SNe. Proc. Hydrogen-Deficient Stars, Asp Conf. Series **391**, San Francisco, CA, USA 2008, 347–357.
- Minchin, R., R. Auld, L. Cortese et al.: The arecibo galaxy environment survey – potential for finding dark galaxies and results so far. In: Proc. Dark Galaxies and Lost Baryons. IAU Symposium **244** Cambridge University Press 2008, 112–119.
- Mizuta, A., M.-A. Aloy und E. Müller: Energy distribution of relativistic GRB jets. In: Gamma-Ray Bursts 2007: Proceedings of the Santa Fe Conference. 2008, 467–471.
- Mizuta, A., M.A. Aloy und E. Müller: Energy Distribution of Relativistic GRB Jets. In: Proc. Santa Fe Conference “GAMMA-RAY BURSTS 2007”, AIP Conference Proceedings, Vol. 1000, 2008, 467-471.
- Mocak, M., E. Müller, A. Weiss und K. Kifonidis: Hydrodynamic simulations of the core helium flash. In: Proc. The art of modelling stars in the 21st century IAU Symposium and Colloquium Proc. **252**, Cambridge University Press 2008. 215–221.
- Moustakas, L., J. Bolton, J. Booth et al.: The Observatory for Multi-Epoch Gravitational Lens Astrophysics (OMEGA). In: Space Telescopes and Instrumentation 2008 - Optical, Infrared and Millimeter SPIE Proc. Series **7010**, Soc. of Photo-Optical Instr. Engineers, Bellingham, USA 2008, 70101B 1-11.
- Müller, B., A. Marek, K. Benkert et al.: Supernova simulations with the radiation hydrodynamics code PROMETHEUS/VERTEX. In: Proceedings: High Performance Computing on Vector Systems 2007. Springer Berlin 2008, 195–210.
- Nakazato, K., K. Sumiyoshi und S. Yamada: Stellar collapse with hadron-quark phase transition of hot and dense matter. In: J. of Progress of Theoretical Physics Supplement. **174**, 76–79.
- Nomoto, K., N. Tominaga, M. Tanaka et al.: Nucleosynthesis in aspherical explosions of population III stars. In: Proc. First Stars III **990**, AIP Conference Proceedings, Melville NY, USA 2008, 291–296.
- Nozawa, T., T. Kozasa, A. Habe et al. Dust evolution in population III supernova remnants. In: Proc. First Stars III **990**, AIP Conference Proceedings, Melville NY, USA 2008, 426–428.
- Nozawa, T., T. Kozasa, A. Habe et al. Evolution of dust in primordial supernova remnants and its influence on the elemental composition of hyper-metal-poor stars. In: Origin of Matter and Evolution of Galaxies. AIP Conference Proceedings **1016**, Melville NY, USA 2008, 55–60.
- Pasquine, L., M. Döllinger, et al. (incl. A. Weiss): Testing planet formation theories with giant stars. In: Proc. Exoplanets: Detection, Formation and Dynamics, IAU Symposium and Colloquium Proceedings Series. Cambridge Univ. Press 2008, 209–222.

- Pasquini, L., M. Döllinger, et al. (incl. A. Weiss): Metallicity and age of selected G-K giants. In: *The Metal-Rich Universe*, Eds. Garik Israelian und Georges Meynet. ISBN-13 978-0-521-87998-9. Series: Cambridge Contemporary Astrophysics. Published by Cambridge University Press, Cambridge, U. K., 2008, p.132.
- Podsiadlowski, P., P. Mazzali, P. Lesaffre et al: The nuclear diversity of type Ia supernova explosions. In: *Astronomy with Radioactivities*. Eds. R. Diehl, D.H. Hartmann und N. Prantzos. *New Astronomy Reviews* **52**, 2008, 381–385.
- Primas, F. und A. Weiss: Special report on the MPA/ESO/MPE/USM 2008 joint astronomy conference chemical evolution of dwarf galaxies and stellar clusters. In: *ESO Messenger* **134**, p. 2
- Revnivtsev, M.: Short term aperiodic variability of X-ray binaries: its origin and implications. In: *Proceedings: COOL DISCS, HOT FLOWS: The Varying Faces of Accreting Compact Objects*. AIP Conference Proc. **1054**, Melville, NY, USA 2008, 143–153.
- Riehm, T., E. Zackrisson, K. Wiik und O. Möller: On the probability for sub-halo detection through quasar image splitting. In: *Proc. Dark Galaxies and Lost Baryons*. IAU Symposium **244** Cambridge University Press 2008, 376–377.
- F. K. Röpkke (2008), Thermonuclear Supernovae “Supernovae: lights in the darkness”, October 3-5, 2007, Mao (Menorca). In: *Proceedings of Science PoS(SUPERNOVA)* 1–25.
- Sauer, D. und P. Mazzali: Interpretation of observed type Ia supernova spectra with radiative transfer models. In: *Proc. of the 6th International Conference on Astronomy with Radioactivities*. Eds. R. Diehl, D.H. Hartmann and N. Prantzos. *New Astronomy Reviews* **52**, 2008, 370–372.
- Setiawan, J., P. Weise, Th. Henning et al.: Planets around active stars. In: *Proc. Precision Spectroscopy in Astrophysics Series: ESO Astrophysics Symposia*, Springer Verlag, Berlin 2008, 201–204.
- Shtykovskii, P. und M. Gilfanov: High mass X-ray binaries and the recent star formation in the host galaxy. In: *Proceedings of the ESAC Faculty Workshop on X-rays from Nearby Galaxies MPE Report* **295**, Garching 2008, 112–115.
- Springel, V.: Supercomputer simulations of the joint formation and evolution of galaxies and quasars. In: *Proc. The Eleventh Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Gravitation and Relativistic Field Theories*. World Scientific Publ. Singapore 2008, 309–325.
- Spruit, H.: Origin of neutron star magnetic fields. In: *Proc. 40 Years of Pulsars: Millisecond Pulsars, Magnetars and More*. Series: AIP Conference Proceedings **983**, Melville NY, USA 391–398.
- Sunyaev R. und J. Chluba: The richness and beauty of the physics of cosmological recombination. In: *Frontiers of Astrophysics: A Celebration of NRAO’s 50th Anniversary*. ASP Conf. Series **395**, San Francisco, CA, USA 2008, 35–47.
- Suwa, Y., T. Takiwaki, K. Kotake und K. Sato: Gravitational wave background from population III stars. In: *Proc. First Stars III* **990**, AIP Conference Proceedings, Melville NY, USA 2008, 142–144.
- Tanaka, M., K. Maeda, P. Mazzali und K. Nomoto: Multi-dimensional simulations of radiative transfer in aspherical core-collapse supernovae. In: *Origin of Matter and Evolution of Galaxies*. AIP Conference Proceedings **1016**, Melville NY, USA 2008, 249–254.
- von der Linden, A., P. Best und G. Kauffmann: ‘Radio-active’ brightest cluster galaxies. In: *From Dark Halos to Light., XL1st Rencontres de Moriond - XXVIth Astrophysics Moriond Meeting*. The Gioi Publ, Vietnam 2008, 449–450.
- Voss, R. und M. Gilfanov: Dynamical formation of LMXBs in the inner bulge of M 31. In: *Proceedings of the ESAC Faculty Workshop on X-rays from Nearby Galaxies MPE*

Report **295**, Garching 2008, 28–31.

Yepes, G., M. Hoeft, S. Gottlöber und V. Springel: Suppressing light in dark matter dwarf halos. In: From Dark Halos to Light., XL1st Rencontres de Moriond - XXVIth Astrophysics Moriond Meeting. The Gioi Publ, Vietnam 2008, 349–354.

Zackrisson, E., T. Riehm, H. Lietzen et al.: The detectability of dark galaxies through image-splitting effects In: Proc. Dark Galaxies and Lost Baryons. IAU Symposium **244** Cambridge University Press 2008, 397–398.

B. Zink, N. Stergioulas et al. (incl. E. Müller): Fragmentation of general relativistic quasi-toroidal polytropes. In: Proc. 11th Marcel Grossmann Meeting (MG11), Eds. H.Kleinert, R.T. Jantzen und R. Ruffini, World Scientific, Singapore, 2008, 1

Prof. Dr. Simon White (Geschäftsführender Direktor)