PhD position in stellar hydrodynamics

The Physics of Stellar Objects group at Heidelberg University/Heidelberg Institute for Theoretical Studies invites applications for a PhD position in stellar hydrodynamics. The successful candidate will perform multidimensional hydrodynamic simulations of convection in stars with specialized low-Mach number schemes. In a joint project with a group in Applied Mathematics, the methods will be extended to include the effects of magnetic fields. The new MHD solvers developed by the mathematics group will be implemented into the existing low-Mach number hydrodynamics code and applied to problems of stellar convection.

The position is available for 3 years and could start on short notice.

The applicant should have a strong background in physics and programming and hold, or expect to obtain, a Masters' degree or equivalent in physics, astronomy, or mathematics. Experience with numerical methods would be a strong advantage.

Applications should include a CV, copies of academic certificates, a 1-page statement of research interests, and two letters of reference. They should be sent to the email address listed below. For additional questions please also use the same email address.

Salary according to 2/3 of the German TVL E13 pay scale.

Application Deadline: July 15, 2019

Email:
friedrich.roepke@h-its.org

Attention to:
Prof. Friedrich Roepke
Zentrum für Astronomie der Universität Heidelberg
Institut für Theoretische Astrophysik
Philosophenweg 12
69118 Heidelberg
Germany