

## Postdoctoral Research Fellow in Theoretical Nuclear Astrophysics

Applications are invited for a postdoctoral position in theoretical nuclear astrophysics to study nucleosynthesis processes and their related nuclear uncertainties. This includes large-scale, Monte-Carlo based, nuclear reaction network calculations, impact studies of reaction rates relevant for various nucleosynthesis processes, as well as development of improved nuclear physics models to predict astrophysical reaction rates. The PDRF will also contribute to other components of the project and be encouraged to develop an own research program and leadership skills.

The appointed PRDF will work with Dr. Thomas Rauscher in the Centre for Astrophysics Research (CAR) at the University of Hertfordshire (UH) but will also perform collaborative work with the astrophysics group at Keele University. CAR is a designated research centre within UH, presently comprised of 20 research-active tenured staff, 12 postdoctoral staff, and 20-30 postgraduate students. UH is located in Hatfield, to the north of central London, which can be reached by train in about half an hour.

The project is funded by a 3-year award from the Science & Technology Facilities Council of the UK. The position is available for up to 3 years with a start date between April 1 and October 1 2015. The starting salary will be on the UH7 academic scale at pt 30 and is expected to be £31,342 per annum, incrementing annually. Consideration to appointment at a higher salary point will be given in the case of some years of post-doctoral experience.

Applicants should have, or should have submitted for, a PhD in nuclear physics or astrophysics or a related area and should have a demonstrated aptitude for research. Experience in theoretical nuclear astrophysics, computer programming and parallel computing is highly desirable.

For informal discussions about the post, please contact Dr. Thomas Rauscher ([pdra@nucastro.org](mailto:pdra@nucastro.org)). Applications should be submitted via the recruitment website (search for post ID 012281 at <http://www.herts.ac.uk/contact-us/jobs-and-vacancies/research-vacancies>) and should be accompanied by the following PDF documents: a CV, list of publications, a summary of previous research (not exceeding two sides of A4 paper). Contact details of 2 referees having agreed to write support letters should also be included. Their letters should be emailed to [pdra@nucastro.org](mailto:pdra@nucastro.org) before the deadline, with the subject line containing "support letter" and the name of the applicant.

The School of Physics, Astronomy and Mathematics at UH takes pride in the diversity of its staff, and is a supporter of the IoP's Project Juno. We encourage applications from all individuals meeting our essential criteria, irrespective of gender or membership of underrepresented groups.

The University is required to meet UKBA visa regulations. Applicants who do not currently have the right to work in the UK will have to satisfy UKBA regulations before they can be appointed.

Closing Date: Monday, 16 February 2015

Vacancy ID: 012281