



## Postdoctoral position in experimental HED plasma physics

The ExtreMe Matter Institute EMMI invites applications for the position of a postdoctoral researcher in the field of experimental high energy density (HED) plasma physics in the newly established EMMI Fellow group for Plasma Physics.

The ExtreMe Matter Institute EMMI at GSI has been established within the Helmholtz Alliance "Cosmic Matter in the Laboratory". EMMI provides a world-wide network for interdisciplinary investigation of matter under extreme conditions – from extremely hot matter of the early universe to ultra cold quantum gases. Information about EMMI is available at <http://www.gsi.de/emmi>.

Within the EMMI Fellow group for plasma physics we conduct state-of-the-art experiments to study the properties of matter at high energy density ( $>1\text{Mbar}$ ), as found in astrophysical objects such as giant gas planets. These states of matter can be produced in the laboratory using high-intensity drivers (lasers, ion beams), by a variety of techniques (shock compression, heating with intense ion beams, laser-generated x-rays and particles). Characterization of the plasmas uses advanced techniques such as x-ray radiography, x-ray diffraction, x-ray Thomson scattering, inner-shell and bremsstrahlung spectroscopy.

Our experiments are conducted at large scale facilities, including GSI's intense heavy ion beam accelerator, the high-energy short-pulse laser PHELIX at GSI, the free-electron laser FLASH at DESY and the Petawatt laser Titan in Livermore, California.

We encourage applications from excellent candidates with a Ph.D. in experimental laser plasma physics. Review of applications will start on 01.11.2011 and will continue until the position is filled. The position is initially for two years with possible extension. The position is expected to be filled in early 2012 but an earlier starting date is also possible. The terms of employment follow the German TVöD (EG 13).

Interested candidates are invited to submit their application which should include a curriculum vitae, list of publications, description of research experience, and the contact information of three potential referees to:

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Electronic application via E-mail is preferred.  
For more information please contact Dr. Paul Neumayer.