GSI Helmholtzzentrum für Schwerionenforschung GmbH

GSI Helmholtzzentrum für Schwerionenforschung operates a unique large-scale accelerator for ions. Researchers from around the world use this facility for experiments which help them make fascinating discoveries concerning the building blocks of matter and the evolution of the universe. In addition, they continually develop novel applications in medicine and technology. In the coming years the new international accelerator facility FAIR, one of the largest research projects worldwide, will be built at GSI.

We are looking for candidates to fill a

PhD position in Experimental Nuclear Astrophysics
Reference number: 1400-17.15

The GSI Helmholz Center for Heavy Ion Research in Darmstadt, Germany, (https://www.gsi.de) offers a PhD position in experimental nuclear astrophysics in the framework of the ERC funded project **ASTRUm: Astrophysics with SToRed highly charged radionUclides.** ASTRUm aims at the development and implementation of nuclear reaction studies as well as half-life and mass measurements in heavy-ion storage rings involving radioactive nuclei relevant in nucleosynthesis and cosmochronology.

The successful candidate will develop a PhD project in *advanced instrumentation and simulation of heavy-ion detection in storage rings with a focus on developing non-destructive detectors for nuclear mass and lifetime measurements at the CR/HESR/ESR/CRYRNG facilities at GSI/FAIR.* This work will comprise of theory and electromagnetic simulation of detectors, development of computer codes, building as well as characterizing detector and/or detector models.

The group is closely connected to the Heidelberg University (https://www.uni-heidelberg.de), where the candidate will be offered to defend his/her doctoral work.

Requirements: The candidate has successfully completed a scientific study of physics, diploma or Master of Science or equivalent. Knowledge of experimental nuclear physics as well as experience in radio frequency and signal processing are expected. Familiarity with CST Microwave Studio Suite, developing electronic circuits and other computer skills such as Python and Linux are highly recommended.

We offer a PhD contract of 3 years. Salary is equivalent to that for public employees as specified in the collective agreement for public employees (TVÖD). GSI supports the professional development of women and encourages their applications. Handicapped applicants with equal qualifications will be given preference.

For any questions please contact PD Dr. Yuri Litvinov (y.litvinov@gsi.de; Tel. 06159/ 71 1758)

Interested candidates should submit their CV with two referee contacts under specification of the reference number until **February 28th, 2017** per E-Mail to: **bewerbung@gsi.de**

Darmstadt, 10.02.2017 Eingruppierung: Entgeltgruppe 13 (50%)