GSI Helmholtzzentrum für Schwerionenforschung in Darmstadt is one of the leading particle-accelerator laboratories for science. In the next few years, the new FAIR (**F**acility for **A**ntiproton and **I**on **R**esearch), one of the world's largest research projects, will be built in international cooperation. GSI and FAIR offer the opportunity to work together in this international environment with a team of employees committed to ensure each day to conduct world-class science.

We are looking for an expert in Analysis & Simulation Software Programming for applications in Nuclear Physics Experiments. We invite applications from

<div align="center">

PhD Physicists (m/f)
for a scientist position in the Nuclear Reactions Department
Reference ID 1240-18.195

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The R³B experiment represents a challenging setup in the frame of the NUSTAR experiments and is carried out in the environment of an international collaboration. The experimental setup consists of several complex detection systems with a large number (up to some 100'000) of spectroscopic channels, based on dedicated front-end electronics, and novel techniques like FPGA based TDC applications, and requires a state-of-the art controls environment. The DAQ system interfaces to the UCESB/R³B-Root simulation and analysis software, which is developed by several contributors within the collaboration.

The position

We are looking for an expert in simulation and analysis software for the development and maintenance of the R3B software environment.

The work includes

➢ overseeing, maintenance, as well as coordination and supervision of the development of the R3B software packages in collaboration with the local IT experts and international collaborators

➢ development of specific detector and tracking software

➢ training and coordination of collaborating local and international partners, and the supervision of students

➢ the applicant is expected to take active part in the experimental programme

Requirements

➢ PhD or doctoral Degree as a physicist, with a record of distributed software developments.

➢ affinity to and experience with complex projects and technical facts.

➢ experience in the following areas:

  o nuclear-physics experiments and detection systems
  o (FAIR)-Root based analysis software
  o analysis and simulation of complex detection systems
  o data handling and distribution
  o software repositories and code maintenance
  o knowledge in hardware near programming
  o knowledge in controls software

➢ good spoken and written knowledge of English and at least basic knowledge of German (a high motivation to learn the German language is expected)

> ➤ skills in organisation, communication, and negotiation

The position is initially limited to a duration of five years in line with the tenure-track treatment. After positive evaluation, it is possible to transfer in an unlimited employment.

Salary is equivalent to that for public employees as specified in the collective agreement for public employees (TVöD Bund).

GSI supports the vocational development of women. Therefore, women are especially encouraged to apply for the position.

Handicapped persons will be preferentially considered when equally qualified.

Information about FAIR and GSI is available at www.gsi.de and www.fair-center.eu.

If you find this position interesting and challenging and would like to work in an exceptional, international, strongly technical environment, please send your full application documents, including the desired salary, with information of your earliest possible starting date and the reference number above to the following address until **February, 15th, 2019** to

GSI Helmholtzzentrum für Schwerionenforschung GmbH
ABTEILUNG PERSONAL
PLANCKSTRAßE 1
64291 DARMSTADT

or by email to: bewerbung@gsi.de