

Postdoctoral Position in Experimental Nuclear Physics:

The physics group at the Grand Accélérateur National d'Ions Lourds (GANIL) has an immediate opening for a postdoctoral research associate in experimental nuclear physics. The successful candidate will work on the active target and time projection chamber (ACTAR TPC) project that is presently constructing a state-of-the-art gas-filled detection system for studying low-energy reactions and decays of nuclei furthest from stability. The detector relies on a highly pixelated pad plane that will consist of more than 16000 electronics channels coupled to a micromesh gaseous (MICROMEAS) amplifier. Data from the individual channels will be processed using a fully programmable set of customized ASIC-based digital electronics that were developed by the General Electronics for TPCs (GET) collaboration.

The successful candidate is expected to play a leading role in the ACTAR TPC project where they will be responsible for assisting with the setup and performing the first physics experiments with this novel device that are anticipated in 2018. Their primary task will be to lead the data analysis for one of these experiments and to publish their scientific results in a timely manner. The candidate will be expected to develop their own research program surrounding this device and will be encouraged to participate in other experiments at GANIL. The ACTAR TPC project is financed through a Starting Grant awarded from the European Research Council (ERC).

Requirements:

- Ph.D. degree in nuclear physics or closely related field
- Expertise in common analysis software (ROOT, IGORpro) and programming (C,C++)
- Familiarity with the use of radiation detectors for nuclear physics applications
- Familiarity with digital electronics for nuclear or particle physics
- Excellent track record in data analysis and publishing scientific results

The successful candidate will join a young and dynamic team that includes experts in electronics design, data-acquisition systems, mechanical engineering, detector physics, and nuclear physics.

The position is initially being offered for 1 year but can be extended to 2 years. The expected starting date is on or before September 2017. Salary is commensurate with experience.

Interested applicants should submit their CV, publication list and arrange to have 3 letters of recommendation sent to Dr. G.F. Grinyer via email (grinyer@ganil.fr). Review of applications will begin immediately. The position will remain open until filled.

More information about the ACTAR TPC project is available on our website:
<http://pro.ganil-spiral2.eu/laboratory/detectors/actartpc>