Post-doc position

in the NCN project – Sonata Bis 7 2018/26/E/ST2/00618:

On-line monitoring of deposited dose distribution in proton therapy using heavy scintillation fibres

The aim of the project is development of method for on-line monitoring of deposited dose distribution in proton therapy. For this purpose an apparatus will be built, which utilizes prompt gamma rays emitted from patient during irradiation. The design is based on fibres made from modern, heavy scintillators. The project is located where medical physics meets nuclear physics and comprises diversity of tasks, from tests of detector components, through building of a modern data acquisition system, to creation of fast algorithms for image reconstruction. The project is realized in the Faculty of Physics, Astronomy and Applied Computer Science of the Jagiellonian University in Kraków, Poland in collaboration with the RWTH University in Aachen, Germany. Project leader is Aleksandra Wrońska, PhD.

Skills and experience:

- Ph.D. in physics, computer science, electronics or similar (or a prospect to obtain it before October 2020),
- passion for experimental work,
- knowledge of at least one programming language,
- ability to work in a group,
- very good knowledge of English.

Desired competencies and experience:

- research using radiation detectors,
- software development in C++, including the ROOT package,
- indpendence in thinking and acting.

Terms of employment:

employment for up to 30 months, possibility to include into the group designated collaborators (Ph.D. students, graduate students)

Documents:

cover letter, cv, copy of the Ph.D. diploma, description of previous scientific work and other experience / achievements, list of publications, letters of recommendation (optional)

Deadline and form of application:

30 May 2020, documents merged into a single pdf file should be sent to aleksandra.wronska@uj.edu.pl. In the document, include the consent for the processing of personal data according to the template from http://bragg.if.uj.edu.pl/RODO_Stypendium.docx.

Additional information:

Interested candidates are invited to contact us directly to get a detailed overview of the project. Selected candidates will be invited for an interview. A winner will be selected by a committee chaired by the project leader.