Post-Doctoral position on GEM detector development

Feb. 28th, 2021 - Feb. 10th, 2021

The Institute of Experimental and Applied Physics (IEAP) at the Czech Technical University in Prague has opened a position for a post-doctoral research fellow. The position is for a period of one year, extendable for two.

The Van de Graaff facility of the IEAP is currently building a spectrometer composed of a system of GEM-based Time Projection Chambers, Multiwire Proportional Counters and Timepix3 detectors for the measurement of angular correlations of electron-positron pairs from nuclear internal pair conversions in 8Be and 4He nuclei. The measurements aim at confirming or disproving recent findings that claim the existence of anomalies in the angular distributions, and will help to validate different models for the physics behind these effects.

The appointed candidate will work at the IEAP in Prague on the development and construction of the GEM readout of the TPC system and on the setup of the MWPC. The work will include the assembly of the detectors and data acquisition (VMM3 and SAMPA), data reconstruction and analysis, and integration of the different components of the system.

The IEAP has a long successful history in the development of pixelated silicon detectors and has recently started a new branch in detector research dedicated to Micropattern Gaseous Detectors. The research project is supported by a grant approved by the Czech Science Foundation (GAČR) with a dynamic team composed by Hugo Natal da Luz, Rudolf Sýkora, Vlasios Petousis, Babar Ali, Lukáš Fajt, Tomáš Sýkora, Zdeněk Kohout and Martin Veselsky who are experienced experimental, theoretical and detector physicists ready to give support for the activities needed.

Candidates should have a PhD in experimental Physics or Physical Engineering, preferably with experience in the work with Micropattern Gaseous Detectors, namely GEMs. Applications should contain a CV, a motivation letter and two reference letters. They should be sent to hugo.nluz@cvut.cz until **February 28, 2021.**