The Department of Particle Physics (DPNC) at University of Geneva has an opening for a Ph.D. Student in experimental particle physics

Candidates must have (or about to obtain) a master degree or diploma in physics with appropriate knowledge and experience in experimental Particle Physics to conduct a Ph.D. on the Mu3e experiment. The position involves also teaching duties. Mastering or willing to learn French will be appreciated. Experience in modern programming languages such as C++ and scripting languages will be valued. The PhD is normally completed in four years with a maximal extension to 5 years. The position is available immediately and will be attributed when an outstanding candidate will have been selected.

The position is on the Mu3e experiment at the Paul Scherer Institutes (PSI) in Villingen (CH). Mu3e will search for the neutrinoless lepton flavor violating muon decay $\mu^+ \rightarrow e^+e^-e^-$ using the world most intense continuous muon beam. The experiment is under construction and first data are expected already in 2017. The University of Geneva is leading the development and construction of a scintillating fiber tracker / time of flight detector with Si-PM readout, which will complement the silicon pixel tracker based on the CMOS HV-MAPS technology. We are also involved in the simulations of the experiment and preparations for the data analysis.

The doctoral work, in the first phase, will focus on the construction and commissioning of the Sci-Fi detector. The successful candidate will participate in test beam studies and characterization of the detector and will be involved in the development of calibration tools for the commissioning phase of this sub-detector. He/she will also perform simulations studies of the Mu3e detector in preparation for the analysis of first Mu3e data. The position involves assistant teaching in French; candidates should be able or willing to learn to teach in French. To complete their curricula, PhD students are also required to attend graduate level classes and participate in seminars.

Candidates should forward at their earliest convenience their application, including curriculum vitae, a transcript of university credits, a motivation letter and three reference letters to:

Mme Liliane Nagy (Liliane.Nagy@unige.ch)
Secrétariat
Département de physique nucléaire et corpusculaire
24, Quai Ernest-Ansermet
CH-1211 Genève 4 SUISSE

Information concerning this position can be obtained from Dr. Alessandro Bravar (Alessandro.Bravar@unige.ch) to whom it is recommended to address an electronic copy of the application.