RESEARCH FOUNDATION CUNY

Careers at RFCUNY
Job Openings

Job Title	Postdoctoral Fellow
PVN ID	YC-2008-003697
Category	Research
Location	YORK COLLEGE
Department	Earth and Physical Sciences
Status	Full Time
Annual Salary	$50,000.00 - $55,000.00
Hour(s) a Week	35
Closing Date	Dec 31, 2020 (Or Until Filled)

General Description

The Experimental High Energy Physics research group at York College of The City University of New York is seeking an independent, highly motivated individual to become a Postdoctoral Fellow working on the Muon to Electron Conversion Experiment (Mu2e) at Fermilab. Mu2e will search for charged lepton flavor violating neutrinoless coherent conversion of a muon into an electron in the field of an atomic nucleus.

The selected candidate will primarily work on target monitoring detectors critical to the success of the experiment: the Production Target Monitor (PTM) and the Stopping Target Monitor (STM). These systems use a variety of detector technologies (including scintillating crystal and solid state calorimetry, proportional wire chambers, and fast scintillating plastic) to monitor both primary proton and secondary muon beams. Our group is the lead institution on the PTM, and has responsibility for alignment and calibration of the STM.

Responsibilities will include detector system development, testing, and integration, as well as software development for detector simulation, control, and analysis. The selected candidate is encouraged to contribute to additional initiatives across the experiment as time allows.

Other Duties

Mentoring and guidance of graduate and undergraduate students, as well as significant travel will be required. As the experiment nears operation, residency at Fermilab may be required.

Qualifications

We are looking for:

- A PhD (by time of appointment) in experimental particle, nuclear, or accelerator physics, or a related field;
- Experience in Monte Carlo simulations with Geant4 or similar toolkits;
- Experience with one or more relevant detector technologies; and,
- Experience with experiment construction and/or operation.