Field of Interest: hep-ex  
Experiment: CERN-LHC-CMS  
Deadline: 2018-12-01  
Region: North America  
Job description:  
The High Energy Physics group at the University of Nebraska-Lincoln (UNL) seeks to hire a Postdoctoral Research Associate to join its research program on the CMS experiment at CERN’s Large Hadron Collider.

The CMS group presently consists of five faculty members, two postdocs, and four graduate students. In addition to CMS, the HEP group also participates in the Askaryan Radio Array neutrino experiment at the South Pole. Current responsibilities in CMS include construction of the HL-LHC inner tracker upgrade, hosting a Tier-2 computing center and innovating CMS software and computing, contributing to electron and photon reconstruction and identification algorithm development as well as operations of the present CMS detector. The group pursues physics measurements in the Higgs, electroweak, top-quark, and beyond-the-standard-model areas. The HEP group also includes one theorist-phenomenologist faculty member and a theory postdoc who work on LHC-related topics.

The successful applicant is expected to take charge of R&D, production preparation, and production of silicon pixel modules for the TFPX detector at UNL. This is a unique and relatively rare opportunity to acquire real hardware experience by building parts of a LHC detector. Very close collaboration with colleagues from a dozen US universities and international institutions involved in the HL-LHC upgrade project is planned, making this position ideal for developing professional contacts. A strong contribution to physics measurements pursued by the UNL group is also expected. The Research Associate is will be resident full-time in Lincoln, NE, overseeing production and testing by a team of graduate and undergraduate workers in our 365 sq ft cleanroom facility, equipped with an automated assembly gantry and custom tooling, wire bonder, and testing stations. Travel and short stays to Fermilab’s LHC Physics Center and CERN are expected to be part of the RAs responsibilities.


To qualify, candidates must have received a Ph.D. in experimental high energy physics within the last five years.
Applications must include a letter of application, curriculum vitae, publication list, a statement of research interests, and at least three letters of reference. Application materials should be sent to:
Ilya Kravchenko (ikrav@unl.edu)
Department of Physics and Astronomy
Jorgensen Hall Rm 208
855 N. 16th Street
Univ. of Nebraska, Lincoln, NE 68588-0299

Applications received by December 1, 2018, will receive full consideration, but the review of applications will begin immediately and continue until suitable candidates are found.

As an EO/AA employer, qualified applicants are considered for employment without regard to race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation. See http://www.unl.edu/equity/notice-nondiscrimination.