Postdoctoral Research Associate (CMS)

Open Date: 04/10/2020

Close Date: 06/08/2020

Description

Fermi National Accelerator Laboratory seeks highly qualified candidates for a Postdoctoral Research Associate working on the Compact Muon Solenoid (CMS) experiment at the CERN Large Hadron Collider (LHC).

Fermilab has a strong and diverse physics research program on CMS. Fermilab is the home of the LHC Physics Center (LPC) and plays a leading role in physics analysis on CMS in the areas of searches for physics beyond the standard model, studies of the Higgs Boson, and measurements of standard model processes. The successful candidate will be highly motivated to conduct physics research and will be expected to lead in analysis of the full dataset of the 13 TeV proton-proton collisions acquired in run 2, and the 14 TeV collisions planned for run 3. The successful candidate will choose their analysis topics.

In parallel to leading in data analysis, the successful candidate is also expected to carry out technical research in the area of computing. The successful candidate will research portability solutions that enable CMS physicists to develop efficient algorithmic code that can run simultaneously on CPUs and a variety of accelerators like GPUs. The successful candidate will bring their physics expertise and learn from a team of world-leading HEP computing experts and extreme computing experts from the DOE Advanced Scientific Computing Research (ASCR) program to become an expert in modern software development.

Positions are for an initial period of up to three (3) years, with the potential for extension considered on a yearly basis thereafter.

Successful candidates will respect, understand and value individual differences that embody the principles of diversity and abide by all environment, safety, and health regulations.

Qualifications and Essential Job Functions

·   Ph.D. in particle physics or a related discipline by the time of the appointment.
·   Strong record of recent accomplishments in experimental physics.
·   Expertise in scientific computing for physics experiments including experience in the area of scientific software frameworks and algorithm development or simulation in C++.
·   Excellent oral and written communication skills as demonstrated by presentations at conferences and a record of publication(s) in peer-reviewed journals.

Application Instructions

Interested candidates should submit via Academic Jobs Online:

1)   a brief cover letter
2)   curriculum vitae,
3)   statement of research interests,
4)   list of selected publications, and
5)   at least three letters of reference.

Please use this URL https://academicjobsonline.org/ajo/jobs/16231.

For general information about these positions, please contact Dr. Robert Harris at

rharris@fnal.gov.<<mailto:rharris@fnal.gov.>>

Physical Activity and Work Conditions

HUMAN FACTORS: Mental Concentration, Sitting, and Tight Work Schedule.
In addition, the ability to travel by automobile and/or commercial air carrier both domestically and internationally is required.

There is no legal requirement that Fermilab sponsor an employee for U.S. permanent residence. As a result, Fermilab will make the decision to sponsor an employee on a case-by-case basis. Fermilab will consider the following factors, among others, when determining whether to sponsor an employee for U.S. permanent residence: performance, length of service, long-term need for the position, and cost.

Diverse People, Diverse Jobs
Fermilab is an Equal Opportunity Employer. Minorities/Women/Disabled/Veterans are encouraged to apply.