

## Postdoctoral Researcher at the Catholic University of America

Applications are invited for a postdoctoral researcher position in experimental high energy physics with the Catholic University of America (CUA), beginning as early as August 19, 2024.

The successful candidate will work on the Compact Muon Solenoid (CMS) experiment at the large hadron collider (LHC) and is expected to achieve significant experimental advancements in three key areas: work on the CMS pixel detector, fulfilling experimental physics responsibilities, and conducting physics analysis.

The CMS group at The Catholic University of America has leading roles in the silicon pixel tracking detectors of the CMS experiment, including module assembly for the Phase-2 pixel upgrade of the CMS detector, and tracker material budget and geometry validation. Members of our group played leading roles in the original construction of the CMS Forward Pixel Detector, the Phase-1 Upgrade and are beginning construction of the next generation of detector. Group members have leadership roles in CMS physics analyses with interests ranging from searches for exotic particles to dark matter physics. The CUA CMS group is also a QuarkNet site (<https://quarknet.i2u2.org>) and has been working closely with QuarkNet teachers.

The position would be based in Washington DC working in the clean room laboratory. Travel to CERN and conferences would be possible, but not mandatory. Successful applicants are expected to play a leading role in physics analysis and pixel module production at CUA. Essential Responsibilities Include: assisting with the research of the CMS Group. Working on R&D for the HL-LHC upgrade, fully utilizing the Run 3 data collected by CMS and playing a pivotal role in the searches for new physics, advising graduate and undergraduate students, and working with QuarkNet teachers.

Minimum Qualifications: A PhD or about to obtain a PhD in experimental particle physics, experimental nuclear physics or a closely related field.

**Candidates who are applying for this position must fill out the google survey form (see the URL link of More information) and upload your cover letter, curriculum vitae, research statement, and names and contact information for three references in the URL link.**

Contact:

- [Yu, Shin-Shan](mailto:syu@cern.ch) (syu@cern.ch)

**Letters of Reference should be sent to:**

- syu@cern.ch

**Google Survey:**

- [https://docs.google.com/forms/d/1AshnbdFqq9aj\\_uqP-McN0ue3vQKpGGntAQQks6\\_T0w0/viewform?edit\\_requested=true](https://docs.google.com/forms/d/1AshnbdFqq9aj_uqP-McN0ue3vQKpGGntAQQks6_T0w0/viewform?edit_requested=true)