

U.S. CMS Undergraduate Summer Internship Program

Meenakshi Narain Brown University June 6, 2022



CMS Code of Conduct

Approved by the CMS Collaboration Board 12-April 2019

The CMS collaboration consists of members with varied national origin, ethnic background, race, gender identity, sexual orientation, gender, age, physical ability, and religion. As a community, we are committed to being positive and inclusive in all regards.

We follow the <u>CERN Code of Conduct</u>. Members of CMS must maintain a professional environment in an atmosphere of tolerance and mutual respect and abstain from all forms of harassment, abuse, intimidation, bullying, and mistreatment of any kind. This includes, but is not limited to, intimidation, sexual or crude jokes or comments, offensive images, and unwelcome physical conduct. Members must keep in mind that behavior and language deemed acceptable to one person may not be to another.

We commit to helping our community adhere to this code of conduct and speak up when we see possible violations of it. We strive to treat those outside of CMS as we would members of our own community. In the event that the letter or the spirit of this code has been violated, appropriate action will be taken, up to and including procedures specified in Annex A3.2 of the CMS Constitution.







The U.S. CMS Collaboration

- U.S. CMS is a collaboration of about ~1200 members from 54 Universities institutes including Fermilab.
- It is one of the largest collaborations of in the US particle physics community.
 - It trains ~200 students/yr, ~100 postdocs/yr,
 - produces ~45 Ph.Ds/yr,
 - published ~1000 scientific papers; and
 - provides significant leadership of the LHC



• Many Activities in support of Physics & DEI listed in the recent review slides:

https://drive.google.com/file/d/1m4OnrT-CgqyVYdc4hNB1hrNn60Rr3j1A/view?usp=sharing



Trends in U.S. CMS membership



The Goal of the Program

- As part of our commitment to diversity and inclusion this program maps to the USCMS DEI Action Plan "Identity formation and community engagement".
- This internship offers undergraduate students an opportunity to perform a project under the mentorship of scientists working at the frontier of Physics.
- Students will use computational tools and data-science methods to learn about fundamental particles and their interactions. Students will analyze data obtained from the CMS experiment at the Large Hadron Collider located at CERN, Switzerland.
- Our aim is to strengthen our research by building an inclusive and diverse community with a wide range of perspectives.
- In addition, the research internships will possibly help and encourage the students to persist in a STEM major through college and train them in skills needed for a future career in the STEM workforce.



Program dates June 6 - August 2022

Our expectation is that the students will complete this program, with the help of the mentors.

We require at least 40 hours of work week

Please check in with your mentor each day at 9am, via a "hello" in the Slack channel directly to your research mentor

Thank you



Meenakshi Narain

Professor of Physics Brown University Chair, USCMS Collaboration Board meenakshi_narain@brown.edu

My research:

I am interested in searching for new particles, studying properties of known particles (top quark, Higgs Bosons etc).

I am also involved in R&D and construction of Silicon detector based tracker detectors.

l enjoy:

teaching; problem solving; working in collaborative environments; learning new and innovative ideas from my students; cooking and exchanging recipes.

Challenges I like to tackle:

promoting Diversity, Equity and Inclusion practices in research, teaching and learning. promoting dialogues to create awareness of underrepresented groups in Physics / STEM

I've got my eyes on:

learning to sail; organize events which meld science with arts and music; spend more time in-person with family and friends.



