

# Virginia QuarkNet Center 2022-2023 Activity Report

October 22, 2023

The Virginia QuarkNet Center currently has grown to around 15 active high school teachers from Williamsburg, Richmond, and northern Virginia. Josh Erlich from William & Mary and Phil Rubin from George Mason University are the mentors. Lead teachers and QuarkNet LHC Fellows Mike Fetsko and Maria Niland have been sharing the bulk of the organizational responsibilities.

## Masterclass 2023

William & Mary hosted a CMS Masterclass on March 11, 2023 for around 20 students from VA and MD. In addition to the analysis of CMS data and videoconference with Fermilab, students toured a remote NOvA control room hosted by Tricia Vahle, a spokesperson for the NOvA experiment.



Students at Masterclass (William & Mary)

## Workshops

The Virginia Center hosted a three-day Summer workshop on August 2-4, 2023. The first day of the Summer workshop was focused on planning for QuarkNet activities for new QuarkNet teachers, and involved around five established QuarkNet teachers. Ken Cecire attended. The second and third days were full of activities hosted by the QuarkNet regulars for the new QuarkNet teachers: intro to QuarkNet, particle cards, homemade cloud chambers, Rolling with Rutherford, intro to World-Wide Data Day and International Masterclass, and how to incorporate particle physics in honors and AP classes. We also heard a lecture by Camillo Mariani virtually with the Virginia Tech and Virtual QuarkNet Centers.



Teachers with cloud chambers at Summer workshop  
(William & Mary)

## Other Activities

Maria Niland attended the CERN High-School Teacher Program during Summer, 2023.

Veronica Monte, one of the new members of our QuarkNet Center, attended Data Camp during the summer.