

# University of Washington QuarkNet Center Annual Report 2017

Mentor: Prof. Shih-Chieh Hsu Co-mentor: Dr. Michael Park (lecture in UW Bothell)

Michael is new to the QuarkNet. We organized three successful activities in 2017. The 1-day masterclass in March, 2-day teacher-only LIGO e-lab and 3-day Cosmic Ray Muon Detector workshop.

## CMS Masterclass (March 11 2017)

<https://quarknet.i2u2.org/content/2017-cms-masterclass>

There are 38 students and 2 teachers from Bellevue (1), Nathan Hale High (3), Interlake (19 led by Michael P O'Byrne), Meadowdale (15 led by Jim Landon). We arranged a CENPA tour before the workshop.

## LIGO e-Lab (Aug 14-15 2017)

<https://quarknet.i2u2.org/content/2017-ligo-e-lab-workshop-washington>

Shane Wood led activities for 3 teachers: Jim Landon (Meadowdale), Tseveldorj Oyuntugs (Stadium), Karl Englert (Nathan Hale). Oyuntugs is a new teacher this year. It's the first time we arranged LIGO e-lab in UW and had a great fun with inspiring reflection session.

## Cosmic Ray Muon Detector Workshop (Aug 16-18 2017)

<https://quarknet.i2u2.org/content/2017-cosmic-ray-workshop-washington>

Kenneth Cecire led 3 teachers (same as LIGO e-lab) and 3 students for a field trip in Snoqualmie to measure Cosmic ray flux difference between altitude  $\sim 0\text{m}$  (Seattle campus) and  $\sim 900\text{m}$ . We had a great fun and measured 30% increase of flux.



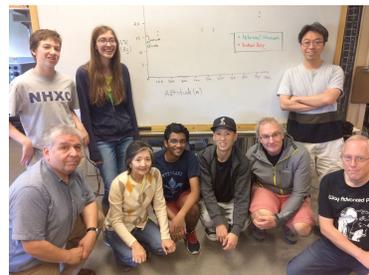
March CMS Masterclass 2017



August LIGO e-Lab



Cosmic flux in Guye Cabin in Snoqualmie



Cosmic flux vs altitude