

# How the EDIT School Changed Our Lives

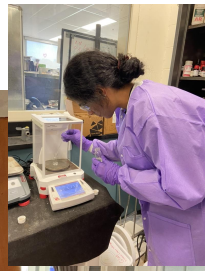
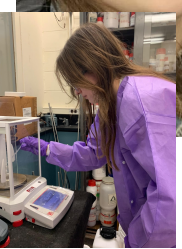


**Brookhaven**  
National Laboratory



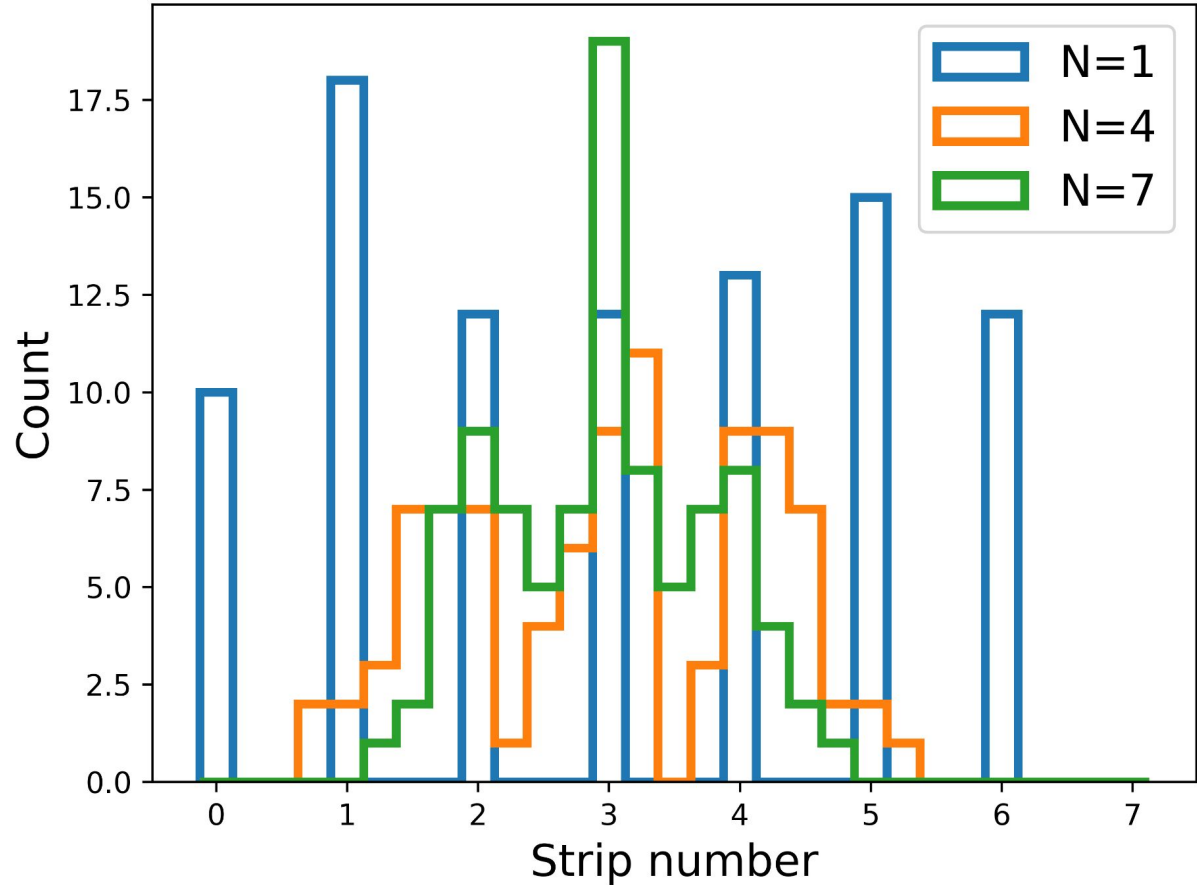
**Group 4: Alec Duquette, Bhavna Nayak, Emily Duden,  
Jason Fan, Mark Ddamulira, Robert Larsen, Vlad Berle**

The excellence in detector and instrumentation technology was the friends we made along the way

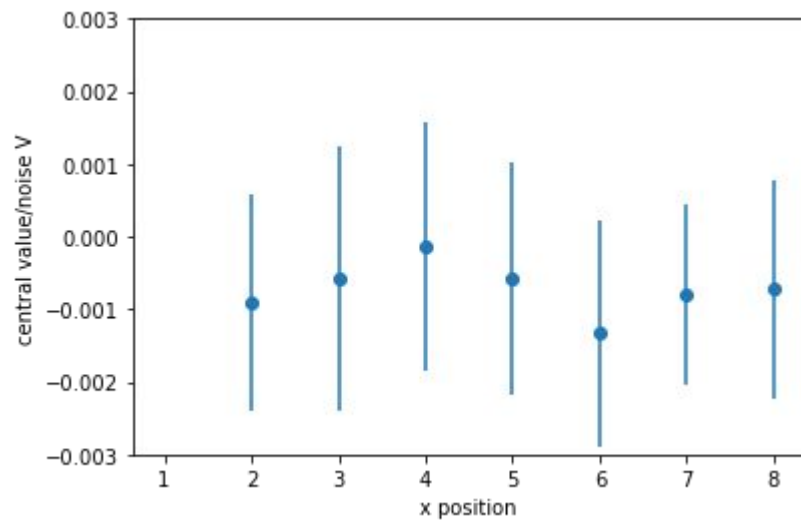


# TANDEM

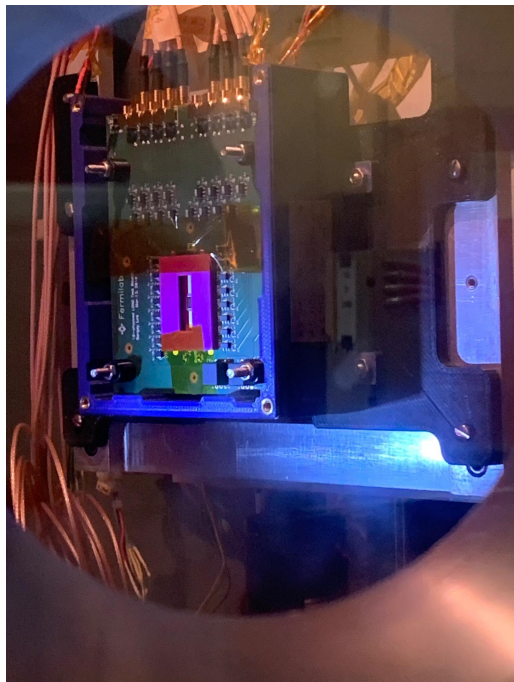
Beam profile constructed as a weighted mean of the strip position of the N strips with highest amplitude, with weights given by peak amplitude.



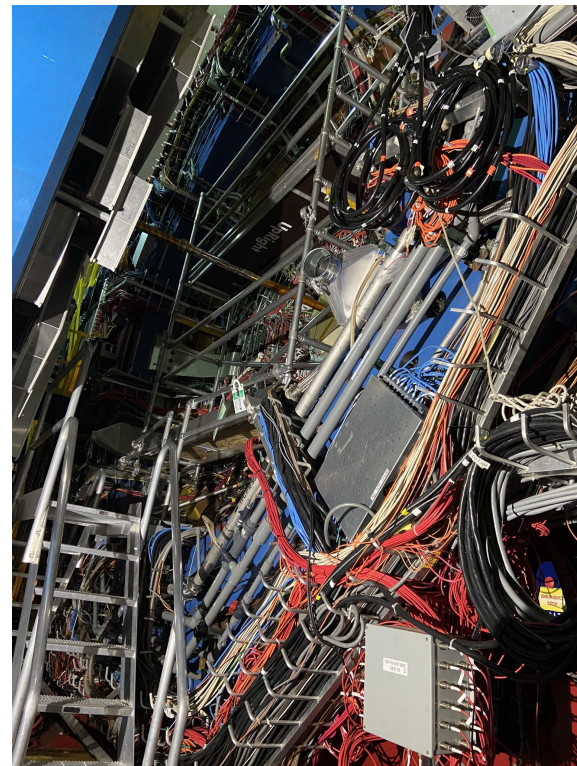
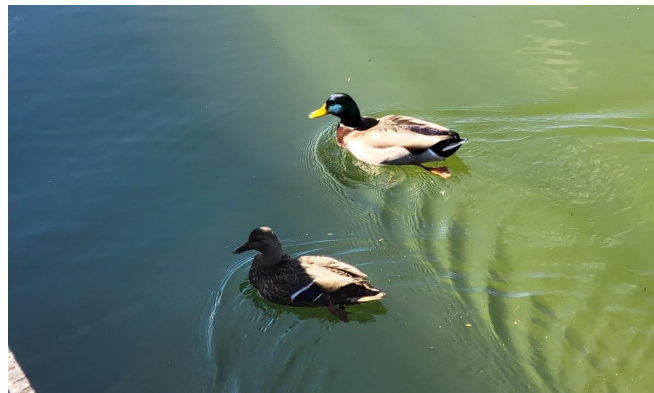
# Tandem plot 2



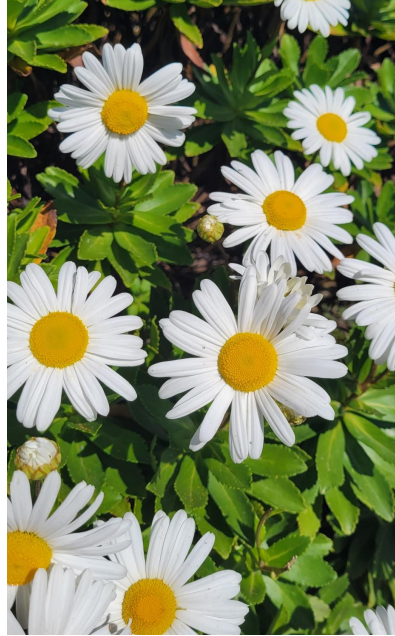
# Cool things we saw



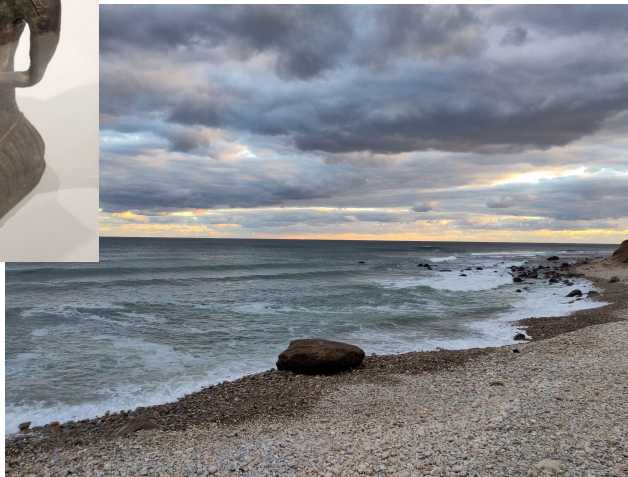
Strip AC LGAD silicon sensor



STAR experiment

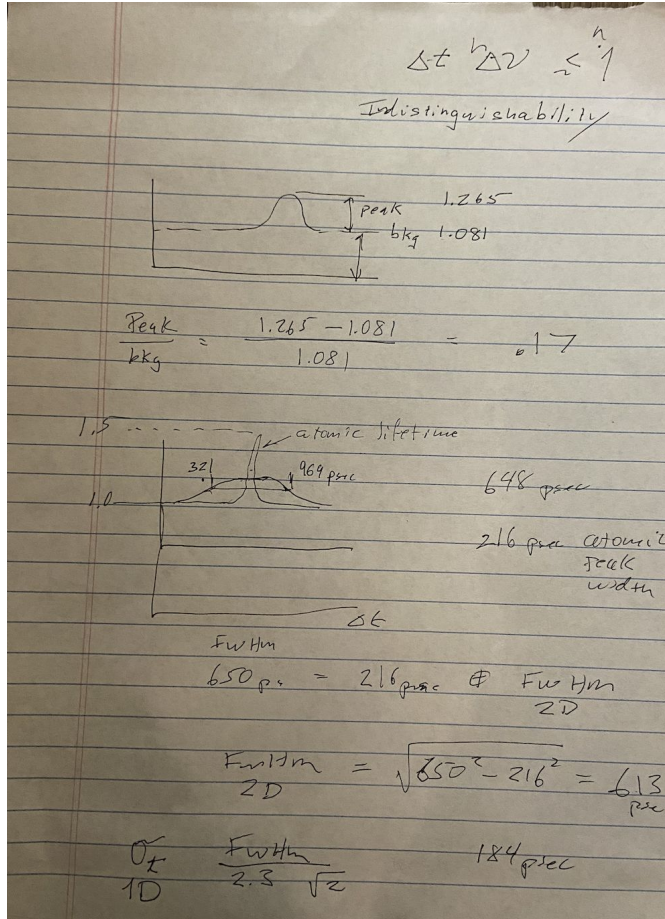


# Weekend Shenanigans

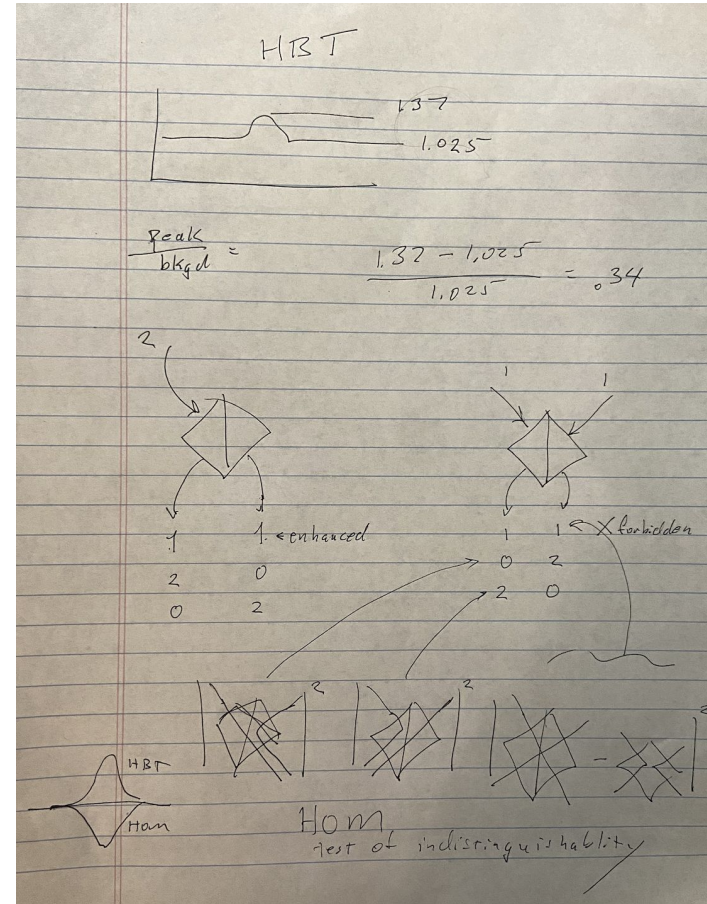


# Quantum Networking lesson

Observing photon clumps



Calculating jitter in our instrument



Hanbury Brown and Twiss effect: boson clumps

Hong-Ou-Mandel effect: if two indistinguishable photons enter a beam splitter, they can't exit with one photon in each mode



# Complaints about logistical stuff

- Danfords dinner>>BNL pizza
  - Make sure enough pizza for everyone
- Enough people had gotten accommodations near the lab before Danfords was suggested or already lived at the lab without transportation that there probably should have been transportation arranged
- Room at Danfords was not very well suited for presentations.
- Danfords not great for academic travellers
  - No computer desks and terrible internet!

# Other thoughts about school content

- Tour of facility was rushed, tried to cover too many topics
- Silicon detectors, electronics, DAQ, and liquid scintillator were great
  - Hands on activity to work with
  - Simulations/hardware of multiple steps of the process
  - Not too deep to be forgettable
  - Not too shallow to the point of wanting more
- Great exposure to different instrumentation technologies

