

CUA QuarkNet Institute

Summer 2022
McMahon Room 112

Tuesday, July 19		
10-10:15am	Arrival/Sign In/Refreshments	Angela/Katryna
10:15-10:45am	Name, School, Grade(s), Subject(s), Something you are curious about related to particle physics	Angela/Katryna/Aaron
10:45-11am	QN Institute overview - agenda	Angela
11-11:30am	Registration QuarkNet website review update profile data activities portfolio (see quarknet.org) e-Lab accounts Looking toward the end: Survey and Implementation	Martin
11:30-12:30pm	Lunch	Angela/Katryna
12:30-1:15pm	Classroom Implementation - 1. Paul K. 2. Inquiry Chart 3. Questions	Angela/Katryna
1:15-2:15pm	Intro to CERN/Basic CMS overview	Rachel
2:15-3:15pm	Intro to Cosmic Rays	Martin
3:15-3:30pm	Break	
3:30-4:30pm	Detector testing, reconditioning, and adjustment	Martin
4:30-5pm	Reflection	Angela
Wednesday, July 20		
10-10:15am	Arrival/Sign In/Refreshments	Angela/Katryna
10:15-10:30am	Check in/Recap/Reflect	Martin
10:30-11:30am	Cosmic Ray e-lab	Martin
11:30-12:30pm	Lunch	Angela/Katryna
12:30-2:30pm	Detector set-up; take data	Martin
2:30-2:45pm	Break	
2:45-3:30pm	<i>Using eLab without a detector</i>	Martin

	<i>Muon lifetime, Moon Shadow, g-2, and Shielding</i> <i>CR-related Data Activities</i>	
3:30-4pm	Short research projects - brainstorm	Martin
4-5pm	set up for overnight data collection	Martin
Thursday, July 21		
10-10:15am	Arrival/Sign In/Refreshments	Angela/Katryna
10:15-10:30am	Check in/Recap/Reflect	Martin
10:30-11am	Work on implementation chart	Angela/Katryna
11-11:45am	Check and Calibrate CRDs	Martin
11:45-12:30pm	Lunch	Katryna
12:30-1:30pm	Check on data Upload to e-Lab Analyze	Martin
1:30-2:30pm	Lab tour - Hannan 237	Rhea
2:30-3:45pm	Conclude research discuss results draw conclusions create posters	Martin
3:45-4:45pm	presentations	Martin
4:45-5pm	reflection	Angela
Friday, July 22		
10-10:15am	Arrival/Sign In/Refreshments	Ken/Angela
10:15-10:45am	Shuffling the Particle Deck	Ken/Martin
10:45-11:30am	Where's Higgs? (responses)	Ken/Martin
11:30-12:15pm	Lunch	Katryna
12:15-1:30pm	Higgs - What have we learned? (slides)	12:15-1:15 Aaron 1:15-1:30 Discussion Martin/Katryna
1:30-2:45pm	Particle ID in CMS (slides)	Allison
2:45-3:00pm	Break	
3:00-4:30pm	Search for Higgs in CMS data • Intro slides • Z-mass activity (calculator) (data) • MassCalc spreadsheet • iSpy for Higgs@10 (results form) (output)	Ken/Martin
4:30-5pm	Wrap Up	Ken/Katryna