## QuarkNet at OSU, July 24-27, 2018

Schedule (updated July 20)

Ro	~ "	
πυ	UI.	us.

Meeting room - PS 147
Physics lab - PS 054
Research labs - various

	Activity	Leader/Speaker
Tuesday (7/24)	Coffee	
9:00 (15')	Welcome, sign-in	Joe Haley
9:15 (15')	Introductions and safety	Nate Unterman
9:30 (45')	Overview of to Cosmic Ray e-Lab	
10:15 (45')	Shuffling the Particle Deck	
11:00 (15')	Break	
11:15 (45')	Set up detectors, label cables	Nate Unterman
12:00 (60')	Lunch	
1:00 (60')	Verify e-Lab accounts, EQUIP calibration, begin data taking	Nate Unterman
	http://www.i2u2.org/elab/cosmic/	
2:00 (45')	Mass, histograms, and pennies	
2:45 (30')	Data upload and check	
3:15 (30')	Reflection and discussion	
3:45 (15')	Set up for data run 1 (over night)	
4:00 (15')	End of day clean-up	

Wednesday (7/25)	Coffee	
9:00 (15')	Reflection on previous day and sign-in	
9:15 (30')	e-Lab tour 1	Nate Unterman
9:45 (30')	Upload data run 1, begin to explore results	
10:15 (15')	Break	
10:30 (30')	e-Lab tour 2, data analysis discussion	Nate Unterman
11:00 (60')	Take data run 2	
12:00 (60')	Lunch	
1:00 (60')	Uploade data run 2, finish analysis, create posters	Nate Unterman
2:00 (90')	Group presentations	
3:30 (30')	Reflection and discussion, clean-up	
4:00 (30')	Evaluation and surveys	
Thursday (7/26)	Coffee	
9:00 (15')	Reflection on previous day and sign-in	

9:15 (30')	Intro to particle physics, part 1	Joe Haley
9:45 (30')	Questions and discussion	,
10:15 (15')	Break	
10:30 (30')	Lab tour 1: Lasers and BEC	Yingmei Liu
11:00 (30')	Lab tour 2: Lasers and BEC	Al Rosenberger
11:30 (30')	Intro to particle physics, part 2	Joe Haley
12:00 (60')	Lunch	
1:00 (60')	ATLAS detector	Evan Van de Wall
1:30 (30')	Questions and discussion	
2:00 (15')	Reconstructing heavy particles	Joe Haley
2:15 (45')	Z mass exercise	
3:00 (60')	Lab tour 3: Radiation - Venture One Building	Eric Benton

Friday (7/27)	Coffee	
9:00 (30')	Reflection on previous day and sign-in	
9:15 (30')	Introduction to Supersymmetry	Egor Antipov
9:45 (30')	Questions and discussion	
10:15 (15')	Break	
10:30 (30')	Searching for Supersymmetry	Egor Antipov
11:00 (30')	Questions and discussion	
11:30 (90')	Lunch	
1:00 (30')	Lab tour 4: Nano	Dave McIlroy
1:30 (30')	Break	
2:00 (90')	REU poster session and judging (HBRC atrium)	
3:30 (15')	QuarkNet workshop survey	
	Group photo!	

## \*Links:

LHC game: http://tinyurl.com/lhcgame

e-Lab registration: http://tinyurl.com/elabreg

Cosmic Ray Muon e-Lab: http://www.i2u2.org/elab/cosmic/

QuarkNet Site: https://quarknet.org/

Workshop Google folder: https://tinyurl.com/QuarkNet2018

## Contact Information:

Joseph Haley <joseph.haley@okstate.edu> Flera Rizatdinova <flera.rizatdinova@okstate.edu> Nathan Unterman <nunterman@gmail.com>