



## Quarknet International Neutrino Masterclass:

April 4, 2025

TIME	ACTIVITY	
0830 - 0845	Arrival@ SLHVC and escort to Check in at <u>Sanford Underground Research Facility Education and Outreach Building</u> , 633 E. Summit St, Lead (KR)	
0845 – 0900	Introductions Name, grade, school, favorite science class so far, favorite ice cream	
0900 – 0930	Neutrinos: Just Passing Through (the beginning of the story) Chad Neutrinos: DUNE Experiment (the future) <a href="http://www.fnal.gov/pub/science/lbnf-dune/photos-videos.html">http://www.fnal.gov/pub/science/lbnf-dune/photos-videos.html</a> <a href="http://news.fnal.gov/2018/09/first-tracks-in-prototype-for-neutrinoexperiment/">http://news.fnal.gov/2018/09/first-tracks-in-prototype-for-neutrinoexperiment/</a>	
0930 – 1030	Hulette/Lower Brule– tour (Ashley/Nicol(tail))	Newcastle / Spearfish -Data activity (Chad)
1030 – 1130	Hulette/Lower Brule –Data activity (Chad)	Newcastle /Spearfish- tour (Ashley/Nicol (tail))
1130-1230	Data Analysis* Student Start Page:	
1230-1315	Lunch with a Scientist	
1315-1345	Science and Coding analysis	
1345-1445	video conference	
1445-1500	Debrief and Prepare to Adjourn	

**Time:** Arrive: 8:30 AM Depart: 3:15 PM **All**

**activities in E&O Conference Room.**

**Number of Students:** 30

**Location:** [Sanford Underground Research Facility](#), 630 East Summit Street,  
Lead, SD (PM)

**Group Contacts:** (Newcastle) Zach Beam ( [deamz@wcsd1.org](mailto:deamz@wcsd1.org))

(Lower Brule) Bree Oatman ( [bree.oatman@lowerbruleschools.org](mailto:bree.oatman@lowerbruleschools.org))

(Hulette) Emily Simensma ( [siemonsmae@crook1.com](mailto:siemonsmae@crook1.com))

(Spearfish) Steve gabriel ( [sgabriel@spearfish@k12.sd.us](mailto:sgabriel@spearfish@k12.sd.us))

**Sanford Lab Coordinator:** [Chad Ronish](#), 605-571-2321 (office); 605-209-0939 (cell)

General Instructions:

- Please instruct all students to wear closed-toed shoes for the Hoistroom tour and bring a light coat as Saturday may be cool.
- Please let us know if your students have laptop computers they can bring? 2 people per computer will be fine.
- Please provide the names of students who are tentatively attending by 3/31/2025