

Neutrino Properties Working Group, NF05

- **The plan:** A series of 2.5-hour weekly workshops all summer
 - Start after Neutrino 2020
 - End before LOIs are due (we want to bring a lot of nuclear physicists into process)
 - Focus on 5-15-year outlook
 - Start with colloquium-level intro; end with prompted discussions
 - Tentatively: Wednesday mornings

Preliminary List of Planned Workshops (Alphabetical Order)

1. Direct neutrino-mass measurements
2. Electromagnetic properties of neutrino
3. Experimental aspects of $0\nu\beta\beta$, I
4. Experimental aspects of $0\nu\beta\beta$, II
5. Other probes of Majorana vs Dirac nature
6. Other neutrino fundamentals
7. Theoretical nuclear aspects of $0\nu\beta\beta$
8. Theoretical particle physics aspects of $0\nu\beta\beta$

Joint with NF08 Theory?

Maybe add non-oscillation searches for BSM neutrino physics, joint with NF02/3?

Sample Schedule for NF05 Workshop

Workshop: Direct Neutrino-Mass Measurements

Time (min)	Topic	Notes
25+5	Introduction: Measurement principles, and the present and immediate future	Colloquium-level talk
15+5	Future Outlook: Beyond 0.2 eV in tritium	More technical, experimental talk: KATRIN, Project 8, and PTOLEMY
15+5	Future Outlook: Beyond 0.2 eV in holmium	More technical, experimental talk: ECHO, HOLMES, and NuMECS characterization efforts
10+10	Future Outlook: Prospects for other isotopes	More technical talk including ^{187}Re and ^{115}In (no significant efforts at present)
20+10	Spectral calculations and neutrino mass	More technical, theoretical talk
30	Group discussion on two topics: 1. What can Snowmass do for you? 2. What are the most pressing experimental and theoretical challenges for 0.2 eV and beyond?	Workshop deliverable: two lists in response to discussion points

2.5 hours total