Science Questions & Working Groups

Day 1-2

- **Q1.** What are the reach and experimental limitations of current and future direct neutrino mass experiments?
- **Q2.** What can we learn about neutrino mass and mass hierarchy from double beta decay experiments, and what is their future reach?
- **Q3.** What can we learn from astrophysical or cosmological observations about neutrino mass and the mass hierarchy?

Working Group Room Assignments

- Q1 – direct measurements, room C521
- Q2 – double beta decay, room C441
- Q3 – astrophysics/cosmology, room C520

- **Working Group Q2.** (Wilkerson)

- What can we learn about neutrino mass and mass hierarchy from double beta decay experiments, and what is their future reach?
  - what constitutes a discovery of 0νββ?
  - what information do we need to extract information about the ν mass?
  - what is required to decide on the hierarchy?
  - what makes the NME convincing? why are he QRPA and NSM matrix elements different?

Science Questions & Working Groups

- **Working Group Q1.** (Robertson, Weinheimer, Nucciotti, Gatti...)

- What are the reach and experimental limitations of current and future direct neutrino mass experiments?
  - how to get down to 20 meV?
  - what techniques might be feasible?

Science Questions & Working Groups

- **Working Group Q3.** (Dodelson)

- **Q3.** What can we learn from astrophysical or cosmological observations about neutrino mass and the mass hierarchy?
  - ????

Working group charge

- discuss and refine science question
- formulate questions and issues to be answered in your working group
- what would be a useful output from your working group?
- we will discuss any issues/questions in plenary session tomorrow