Detector agenda and Imperial objectives

Agree on a first full set of parameters for the simulation of the reoptimization

- Needed urgently for the signal/background studies *as function of* subdetector choices and configurations

**Session 8: Open discussion session**
Session 1: Facility

Session 2 and 3: Global reoptimization

1. **Muon shield and acceptance optimization**
   - Distance/dimensions of decay volume and input for background studies
   - Envelope for emulsion/muon spectrometer (tau neutrino detector)
   - Cost/performance driver

2. **Decay volume**: Update on neutrino background and decay volume options
   1. Steel vessel
   2. Helium balloon
   3. Concrete container ➔ Strong interest from engineering university (Università di Napoli Federico II)
   ➔ Requirements on decay volume/flexibility ⇔ definition of «background free»
   ➔ ...and cost driven...
Session 3 cont’d: Global reoptimization

1. **Surrounding background tagger**
   (merge of SBT and UVT project)
   1. Plastic scintillator
   2. Liquid scintillator
   ➞ Requirements driven by experimental configuration, background, and performance of HS spectrometer

2. (Straw Veto Tagger)

Session 4,5 and 6: Subdetector reports and options/new ideas

- PID options, performance, extensions
- ECAL / PRS very much open – photon reconstruction, RICH?
- MUON report
- HCAL + MUON optimization
- Straw tracker report
- Timing detector options (plastic scintillator, MRPC)
- Configuration of tau neutrino detector
- Status and ideas around emulsion detector and muon spectrometer
- DAQ system

Session 7: Physics session

Session 8: Open discussion session