Discussion on Lab Module 1

What is the role of Laboratory Module 1 (Physical dimensions of 125 m x (25 m)^2)

  Is the depth, dimensions, availability appropriate for science currently envisaged?
  How does it fit into an overall plan for US leadership in underground science?

Large enough?

  to fit the largest experiment?   to fit the variety of experiments we need?
  to fit auxiliary services: Low bkgd assay, Cu electroforming, crystal growth, clean fab

Deep enough

  Are there special advantages to offset deeper choices?
  Can we preserve a future 7400? Political implications of this?

How do we stage experiments and grow?

How do we build a strategy which is resilient with respect to possible delays?

   e.g. -What do we need to be able to use LM1 efficiently from day 1
  How does experience in Davis Cavern and with Majorana Demonstrator help?
  Formal resource and personnel agreements with other labs?

Management Issues & Funding

  What is appropriate management structure for new lab?
  How do experiments pay for existing real estate?
  What about new real estate – do proposals ask for excavation & operation costs?
  How do we pay for common infrastructure – low bkgd assay, cryogens, pure water,
  Process for terminating an experiment at LM 1 to make room for the next?

Discussion on Lab Module 1 - cont

Interaction with LBNE (synergies and interference)

    Advantages and shared resources?

    Quantifiying co-location advantages

    Timeline of LBNE construction vs LM1 construction?

Role of DURA

    Represent all US underground scientists (even overseas ➜ theory center)

    Represent all US underground sites?

    Collaborate with comparable user organizations in Europe and Asia

    How strong and what functionality might we envision?

    Should we explore agency funding for an enlarged, multi-site integrative entity?

Other Science (BGE)

    Re-engage at multiple sites

    Re-engage via low background?

    Other focal points?

    How do we encourage funding?