

# Communications

- 👤 **MANGO update (Filippo)**
- 👤 **Meeting @ LNGS with LNGS on 17th April: tentative agenda?**
  - 👤 **Gas system (LNGS safety & health requirements)**
    - 👤 **Possible exception for short underground test?**
  - 👤 **HV in the cavern: grounding?**
  - 👤 **Shielding & vessel (can LNGS services help in developing?)**
  - 👤 **Forbidden materials underground?**
  - 👤 **Rules to bring material underground**
  - 👤 **Space discussion?**
  - 👤 **Preliminary Risk Analysis development: to be ready for TDR in the fall**

# Measurements to be performed: proposal

- **Run with Co60 + run with AmBe over full detector, to assess electron recoil rejection capability, also as a function of (high energy) signal like events**
  - **This data can be useful to train machine learning algorithm**
  - **While we wait for high level analysis algorithm to be finalised, we can study our rejection capability with simple cut over following correlations:**
    - **track length versus track energy**
    - **track length versus #photon/pixel**
    - **track energy versus #photon/pixel**
- **AmBe with collimator (paraffine blocks?) we can do:**
  - **Test fiducialization technique on nuclear recoils (we did it only on MIPs, Sven only on alphas )**
  - **First estimate of directionality capability (on X-Y projection), but especially head-tail (we know for sure from which direction neutrons are coming). Nobody ever demonstrated head-tail below 40 keV**
- **With CMOS + PMT and AmBe with collimator we can test the combined acquisition, since X-Y projection will be correlated to PMT signal (see arXiv: 1109.3270)**
- **Do all above with at least 2 gas mixture (60:40, 80:20) to see how density (i.e. track length and energy deposit) can influence all above**

# Tentative proposed program

- 🕒 **11th April, at the end of stability test: Co60 run with 80:20**
- 🕒 **11th April evening: switch to 60:40**
- 🕒 **12th April: Co60 run with 60:40**
- 🕒 **If nothing else to do, turn off LEMOn and gas flux**
- 🕒 **Next week: set up the AmBe collimator (to be discussed with Chiti and Bedogni)**
- 🕒 **As soon as we have the collimator, flush LEMOn with Nitrogen for long period (1 day?), then do the AmBe runs**