PTOLEMY

Telecon to be held on 11 of July 2018 at 16:00 Rome Time Zone

Agenda:

- 1) Communication on Simons Foundation outcome and hardware activities at PRINCETON (Chris)
- 2) Report on new study on possible field configuration. (Chris/Alfredo)
- 3) Report on LNGS experimental space preparation. (Marcello)

A.O.B

Minutes:

Chris reported that the Simons Foundation gave him the green light to support him for two more year. He has just to submit the budget.

This will allow him to organize the prototype shipment and work at LNGS. He is also available to give sub-contract to foreign institutions, like InRiM or other institutions.

Furthermore, Chris mentioned that he was able to run a new software much more flexible than Kassiopeia, with which he tested many configurations of coils and magnets that would allow to have a B field drop of ~ 4 order of magnitude across 60 cm.

Chris got a good understanding of the behavior of the B field and this will help to convince the LNGS SC at October meeting.

Carlo Mariani reported on the start of electron transmission measurement across some graphene substrate. The measurements have been set up in a laboratory in Bologna. So far this collaboration with the Bologna group is informal but it might evolve in an official collaboration and support to the experiment.

JulioC reported on the start of study of D diffusion into graphene substrate at CIEMAT. The things are promising in view of the T diffusion and more will be done in the near future. Julio in August will not be available because of vacation period.

More detail about this activity are summarized in the file attached together to the present file.

AukePetr have shown a nice picture of the experimental are selected above ground for the PTOLEMY experiment. Marcello is struggling with the safety service of the laboratory because

they are afraid of the B field which might heart people. As soon as the safe-guard area around the magnet will be defined and if there are no issue with the size of the space selected the official allocation will be done. Soon after this the first batch of the PTOLEMY prototype equipment can be shipped to LNGS.

Two new members joined the experiment: Nicolo de Groot, from The Netherland, and Nicola Rossi from INFN Roma. Nicola gave his availability to support the LNGS activity.

The process that will make PTOLEMY a recognized INFN experiment is still ongoing and will be finalized by the end of September. In case of success the INFN budget can flow more easily.