### SND

8 October 2020

## Minutes of the 1<sup>st</sup> SND Institute Board (Zoom, 8 October 2020)

## **Present:**

C. Betancourt (Zurich, Switzerland), A. Blanco (Coimbra, Portugal), M. Bogomilov (Sofia, Bulgaria), A. Boiarskyi (Leiden, the Netherlands), M. Dallavalle (Bologna, Italy), G. De Lellis (interim Spokesperson), A. De Crescenzo (Napoli & Bari, Italy), A. Golutvin (Imperial College, London), E. van Herwijnen (MISiS, Russia), R. Jacobsson (interim Technical Coordinator), H. Lacker (Berlin, Germany), N. Leonardo (Coimbra, Portugal), A. Murat Guler (METU, Turkey), M. Komatsu (Nagoya and Toho, Japan), N. Polukhina (interim Chairperson, Lebedev, Russia), O. Ruchyaskiy (Kopenhagen, Denmark), T. Ruf (CERN), L. Shchutska (Lausanne, Switzerland), V. Shevchenko (Kurchatov, Russia), R. Wanke (Mainz, Germany), C. S. Yoon (Geyongsang, Korea).

## 1. SND management election.

The Institute Board unanimously elected G. de Lellis as interim (=until approval of the experiment by the CERN Research Board) Spokesperson, R. Jacobsson as interim Technical Coordinator and N. Polukhina as interim Chairperson of the IB.

The SND collaboration is an independent collaboration, albeit with a large support from SHiP (not yet approved).

## 2. Future participation round table

Because of the tight time scale, the Technical Proposal and Technical Design Report will probably be merged into a single document, and this will contain a "money matrix" with Institute commitments.

## Napoli & Bari

Napoli has requested funds to INFN for tungsten, the mechanical support for the target and the muon system. Expect confirmation in November. Bari has requested travel money for a technician to participate in the target assembly, handling and development of emulsion.

#### Coimbra

No funding until the next period (after 2021). Manpower available. Need the matrix to see where they could contribute.

#### Bologna

Have applied for INFN funds like Napoli & Bari. Have a large group (mostly from CMS) that also participated in OPERA in the past and in the SHiP Muon detector. Can contribute to the emulsion scanning.

Group could contribute to the effort on the three downstream muon stations, with a sharing to be defined. Some of us have made R&D for the SHiP muon detector, which is similar in many aspects to the proposed SND muon stations.

Besides, on the longer term, Bologna group is interested in participating to the emulsion scan - group have OPERA tables that could be upgraded.

### **Imperial College**

Can commit part time, possibly with Ph. D. students. Collaborate with MISiS.

### MISiS

Approval of 10 year research plan in December. Pending a positive outcome can contribute to the purchase of the 240  $m^2$  emulsion from Slavich.

### Lebedev

Emulsion quality control. Contacts with Slavich. Scanning. Collaborate with MISiS.

### Berlin

Expect 100K funding for veto + 5 planes. To be spent with Zurich and Mainz. Next funding round end 2021.

### Nagoya & Toho

Committed to Faser-v. Can perhaps contribute to emulsion production if the funding application (October 2020) is successful. after 2021.

### CERN

Technical Coordination. Support from engineering and beams departments. s/w & computing support. Will discuss h/w development in conjunction with the neutrino platform. The use of the emulsion facility at CERN should be planned with the other users. Current development tanks  $(30x25cm^2)$  need to be replaced by  $(40x40cm^2)$ . Could envisage installation of a scanning microscope.

#### METU

METU group plan to do new project application in March 2021. They will ask fund for the construction of mechanical tools that are required for brick assembly. The approval of the project usually takes 2-3 months but it is not guaranteed.

## Geyongsang

Can commit to a system for the optical alignment of the plates and chemicals for the emulsion development. Travel money available and can provide support for the scanning in Japan.

## Sofia

Will only be able to participate after the construction to operation, analysis and will become more active in 2022.

## Lausanne

Will build the SciFi planes using internal EPFL resources. Will apply for more resources next year.

## Zurich

Committed to build the veto and 5 upstream planes. Some manpower available.

## Mainz

Limited manpower. Electronics workshop available. Optimistic about future funding.

## Copenhagen

No funding in Denmark. Can provide theoretical assistance.

## Kurchatov

Will explore the possibility of funding for Atlas interaction point physics.

## Leiden

Can provide theoretical assistance. Funding available in Ukraine through the National Science Foundation, provided a group with young (<35 years) scientists can be identified.

## 3. Miscellaneous

- Once approved, a Common Fund will be necessary.
- A Team Account can be made once the experiment has been approved.
- DAQ, R/O and electronics seem not to be covered.
- Project leaders of subsystems need to be appointed so that cost estimates can be made for the money matrix.

# 4. Collaboration name

The SND title as name of experiment already exists. Group leaders proposed next variants for voting: SND@LHC TANGO (=Three (Anti) Neutrino Generations Observation) TANGO@LHC NSD (Neutrino and Scattering Detector) NSD@LHC Procedure of discussion and voting finished at November 23. The 22 Institute representatives

casted their votes. A few of them reported also a second option. By counting the first preference expressed by each Institute, the number of cast votes is 22, with the following share

SND@LHC 12 TANGO 5 NSD@LHC 3 NSD 1 SND 1

Therefore, SND@LHC got the majority of votes (11+1) and we can conclude that SND@LHC is the name chosen by the Collaboration.

# 5. Next IB meeting

The next IB meeting will be held at a date to be announced after the LHCC meeting, probably early December.

There being no further business, the chairperson closed the meeting.

N. Polukhina