DEEP UNDERGROUND NEUTRINO EXPERIMENT

An "ad interim" proposal

Proponents:

ItalyBologna
Genova

Lecce

LNF Frascati

LNS Catania

Milano e MIB

Padova

India

Banaras Hindu IIT Guwahati Jammu

Jawaharlal Nehru

Lucknow

Russia

INR Moscow JINR Dubna

PNPI Gatchina

U.S.A.

BNL South Carolina

SMU Dallas

Georgia

GTU Tbilisi

Germany

Dresden

Spain

CERN

IFIC Valencia

DUNE-doc-13262 v4:

Multi-purpose detector

- Performances demonstrated: full simulations (neutron, π/γ separation, tracking capabilities, physics sensitivities)
- Compact, easily movable, readiness guaranteed
- Fully funded for the Magnet + ECAL components
- It might be fully funded by proponents

PROPOSAL: the system can temporarily be used from day one of data taking as an MPD downstream of the Argon-cube detector

- We fully acknowledge the extensive work performed by the ND group culminated in the proposal currently discussed at LBNC
- Our proposal is part of the on-going discussions about staging/descoping within the ND group
- The details of the proposal are meant to be a basic suggestion, to be further discussed and improved within the ND group