



**SOUTH DAKOTA MINES**

An engineering, science and technology university

# PNS Working Group Meeting

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**DEEP UNDERGROUND  
NEUTRINO EXPERIMENT**

Pulsed Neutron Source  
Working Group Meeting  
July 21, 2021

# Status

- **Building the PNS Test Setup at SD Mines (Walker's talk)**
  - LANL DD generator is being shipped from CERN to SD Mines. We expect to receive it before September
  - Finalize the shielding designs for PD2 test and laboratory test
  - Start building the laboratory test setup in August.
- **Closing-up the PD1 DD generator data analysis (Yash's talk)**
  - Increase the statistics for both data and simulation
- **Preparing for PD2 (Ongoing)**
  - Run Geant4 simulation for different neutron source locations at PD2
  - Plan to run LArsoft simulation to study the realistic detector response
  - Modify the DD generator: external triggering, separate tube from electronics box
  - Need to coordinate with CERN and DUNE about engineering and safety requirements
- **Completing ARTIE paper**
  - Have addressed the final-round comments from collaborators
  - Paper to be submitted in a week