Contribution ID: **71** Type: **Poster**

C2Po1B-04: PIP-II Cryogenic Distribution System – status and outlook

Tuesday 20 May 2025 09:15 (1h 45m)

The Cryogenic Distribution System (CDS) is a key cryogenic sub-system of Fermilab's upcoming Proton Improvement Plan II (PIP-II) accelerator, responsible for supplying cryogenic helium to support all of PIP-II operating modes and handling overpressure safety. The CDS is being designed and manufactured as a collaborative effort between Fermilab, USA and Wroclaw University of Science and Technology (WUST), Poland. The main components of the CDS are Distribution Valve Box (DVB), Intermediate Transfer Line (ITL), Tunnel Transfer Line (TTL), Cryogenic Controls System, and Warm Piping System. This contribution will delve into the collaborative R&D being done by Fermilab and WUST, highlighting the design and construction progress made to date. The contribution will also present an outlook of the upcoming activities leading to the final commissioning of the CDS.

Author: Dr DHULEY, Ram (Fermi National Accelerator Laboratory)

Co-authors: SOYARS, William; DUDA, Paweł; BANASZKIEWICZ, Tomasz (Wrocław University of Science and Technology); STANCLIK, Michał (Wroclaw University of Science and Technology); PATEL, Vrushank; PATEL, Pratik (Fermilab); YOON, Sungwoon (Fermilab); MARTINEZ, Alexander; CHOROWSKI, Maciej

Presenter: Dr DHULEY, Ram (Fermi National Accelerator Laboratory)

Session Classification: C2Po1B - Large Scale Cryogenic Systems III: Operation & Design III