

LArFCS Cryogenic System progress

Yichen, Sergey

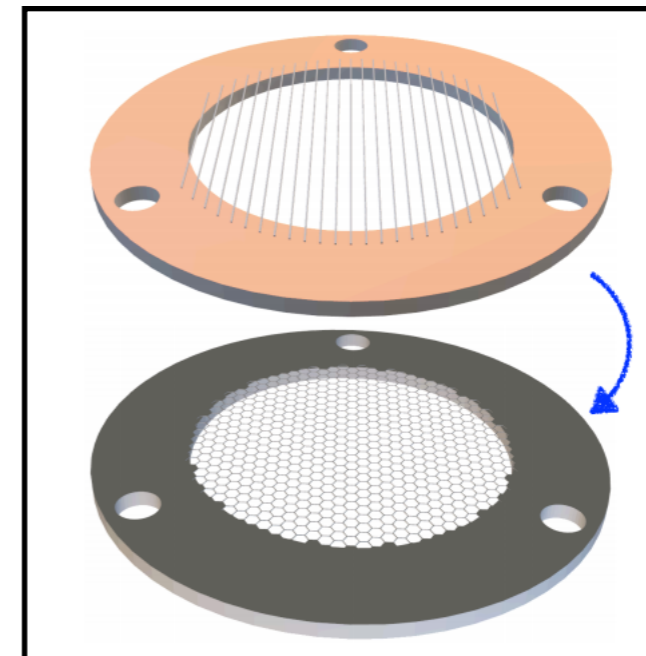
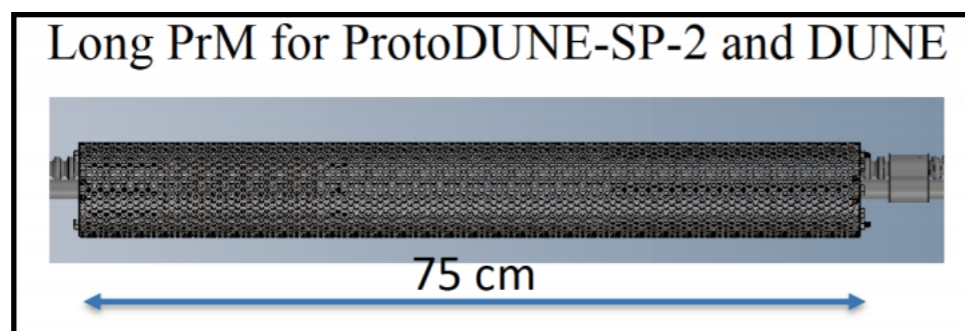
3/23/21

CPAD Updates

▸ CPAD updates

- Haiwang and I gave talk in the Noble Elements session
- Both fit in the Priority Research Direction 6 by 2019 DOE Basic Research Needs Study
- Only 22 attendants in my talk, Jianming asked a question about the turn around time of the new system
- Jianming is talking to the DUNE management for simultaneous concentration+electron lifetime measurement as a test of our purity model
- UCI is working on an upgrade long Purity Monitor for ProtoDUNE 2
 - Total length 75 cm
 - They've done the field simulation and has difficulty on the grid transparency calculation
- Next CPAD will be held in Nov. 2021

PRD 6: Improve the understanding of detector micro-physics and characterization to increase signal-to-noise and reconstruction fidelity



LArFCS Cryogenic Operation

▸ LArFCS Assembly

- Cryogenic operation preparation
 - All the sensors and cables are reconnected
 - Slow controlled updated with the additional RTD from the probe ← some runtime error after overnight running, debugging
 - Cryo Insulation will be wrapped by tomorrow
 - Achim visited this week and want to notice Mike Gaffney once we started
- System control PC was reset twice due to Win10 mandatory auto updates by ITD
 - The PC was exempt before
 - Made request to be added to the new auto update exempt list
- LAr will be delivered this Thursday
 - Expecting to start to fill once delivery received

