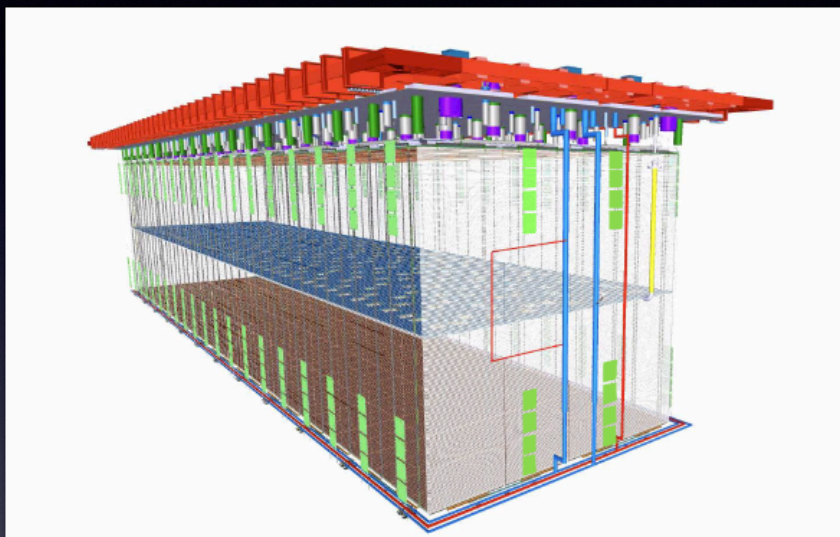


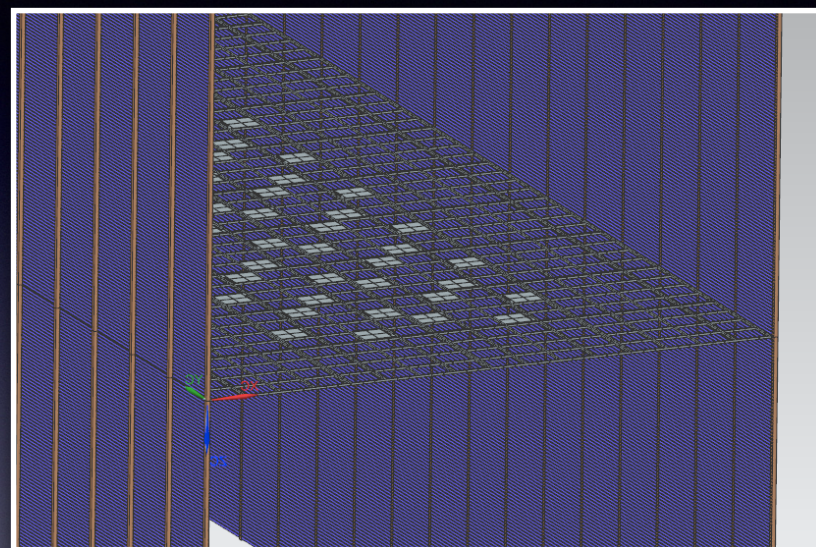
Jun 26 – 28, 2023
Stony Brook University Physics Building

DUNE FD3 Mini-Workshop Toward a Combined Photon Detection and Field Cage System

From this (FD2 - VD)



To this (FD3 - VD Optimized)



“VD Optimized FD3” w/ enhanced PDS Summary and Outlook

June 28, 2023

SBU WS focused on Optimized VD FD3 with enhanced LArPDS (large area PD-FC integrated system - APEX)

APEX integration with VD LArTPC existing CRP well established, viable option for FD3 based on FD2 demonstrated performance achievements, low risk and cost/schedule control.

Opportunity for integration w/ other options (solutions at MoO) were discussed and found favorable.

The large area PD-FC integrated system - APEX - solution for FD3 stands upon a mature, demonstrated technology for FD2.

New/Novel Technical Elements for FD3 are being identified (outcome of this WS) -

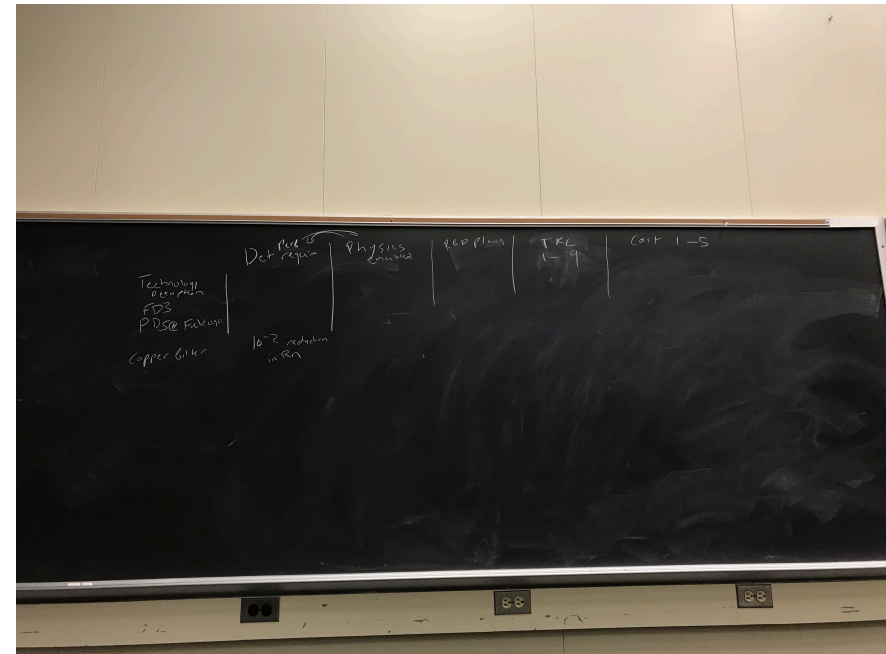
Only Few of these are CRITICAL for FD3 (the other are optional/incremental wrt to FD2 demonstrated solutions)

Technical Readiness assessment for the Critical Elements (among the New/Novel Elements) under evaluation

Path toward Technical Readiness defined based on a realistic Prototyping Staged program (Assuming availability of funds both from EU and US sources)

Perspectives for DUNE Physics Scope Expansion well identified (LowEn UG Physics [5 MeV-500 MeV] and anticipated Background Rejection (to be demonstrated))

Mary & Sergio



SBU WS: >60 Participants,
Great organization - Thank you Wei and SBU Team

