

HV Testing in 35-ton Cryostat (Charge)

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First Group Meeting

June 27, 2016

Purpose

- Validation of ProtoDUNE TPC design
 - FC and CPA designs are significantly different than those operated in the 35-ton detector
 - Could not test full HV in purified liquid argon due to contamination incident
 - Operating proposed beam plug in ProtoDUNE without sufficient testing presents significant operational risk
- Timescale
 - Need to begin construction of final ProtoDUNE FC/CPA modules in early 2017 implies Phase I HV testing should be complete before the end of 2016
 - Focus of integration effort should be mostly at CERN by summer 2017

Rough Schedule

- June 2016 : open cryostat, remove FC/CP assemblies
- July 2016 : warm electronics testing
- August 2016 : remove detector, prepare cryostat/cryogenics
- September 2016 : Install Phase I test setup
- October 2016 : Purge, cool-down, and fill cryostat
- November 2016 : Perform Phase I testing
- December 2016 : Transfer LAr to LAPD, warm cryostat
- January 2017 : Install Phase II test setup
- February 2017 : Purge, cool-down, and fill cryostat
- March 2017 : Perform Phase II testing

Organization of Effort

