

SBN Analysis Workshop: Topic 1 – 2D TPC Simulation and Signal Processing

Michael Mooney (Colorado State University),
Hanyu Wei (Louisiana State University)

SBN Analysis Workshop

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Workshop Topic 1 Items



- ◆ Update Calibration Ntuple Production Workflows – Mike Mooney
- ◆ Update TPC Wire Geometry - Gustavo Valdivieso, Lane Kashur
- ◆ TPC Field Response Calibration/Tuning - Harry Scott, London Cooper-Troendle
- ◆ Implementation of Spatial Variation in TPC Field Response w/ Wire-Cell - Joseph Zennamo
- ◆ Estimation of ROI-finding and Hit-finding Efficiency - Mike Mooney, Tracy Usher
- ◆ Estimation of Charge Bias/Resolution - Lynn Tung, Ewerton Belchior, Tracy Usher
- ◆ Improvement of ROI Finding for 2D TPC Signal Deconvolution - Moon Jung, Hanyu Wei
- ◆ Tune Hit-finding Thresholds - PROJECT FOR NEW PERSON
- ◆ *Insert your item here!*

- ◆ MC samples (stage1/reco2 files and calibration ntuples):
 - **SBND:** /pnfs/sbn/data/sbn_nd/poms_production/official/MCP2023B/calib_production
 - **ICARUS:** /pnfs/sbn/data_add/sbn_fd/mc/SBN_WS_July2023/calib_production
- ◆ SBND MC sample summary (sbndcode v09_75_03_01):
 - 20k CORSIKA cosmics, 1D signal sim. and 1D deconvolution
 - 20k CORSIKA cosmics, 2D signal sim. and 2D deconvolution
 - 10k BNB-like single protons, 2D signal sim. and 2D deconvolution
 - 10k BNB-like single electrons, 2D signal sim. and 2D deconvolution
- ◆ ICARUS MC sample summary:
 - 20k CORSIKA cosmics, 2D signal sim. and 1D deconvolution (icaruscode v09_75_01_01)
 - 20k CORSIKA cosmics, 2D signal sim. and 2D deconvolution (icaruscode v09_73_00)
- ◆ Let Mike M. know if you would to look at ICARUS data