Contribution ID: 119 Type: not specified

## Commissioning TinyTPC: Enhancing LArTPCs Charge Readouts

TinyTPC is a small scale liquid-argon time projection chamber (LArTPC) featuring a pixelated readout system (LArPix) designed to improve the detection of charged particles. To enhance energy measurements at MeV scales, TinyTPC will study the impact of isobutylene, a photosensitive dopant that converts light to charge, and xenon, a wavelength shifter. This presentation will detail TinyTPC's commissioning, operation, data collection methodologies, noise levels, and upcoming tests involving isobutylene, xenon, and radioactive sources.

**Primary authors:** PSIHAS OLMEDO, Fernanda (Fermi National Accelerator Laboratory); ZENNAMO, Joseph (Fermilab); LEMOINE, Hannah; RODRIGUEZ THORNE, Paloma; MCCRIGHT, Hannah; GONZALEZ, Rebecca

**Presenters:** PSIHAS OLMEDO, Fernanda (Fermi National Accelerator Laboratory); ZENNAMO, Joseph (Fermilab); LEMOINE, Hannah; RODRIGUEZ THORNE, Paloma; MCCRIGHT, Hannah; GONZALEZ, Rebecca

Session Classification: DUNE/SBND