

# DUNE:ProtoDUNE-SP Simulation

# 1GeV/c Pion Beam

Candidates

Data/MC

- Signal (Charge Exchange) (45.8%)
- Absorption Background (1.4%)
- Pion Production Background ( $\pi^0 = 0$ ) (9.94%)
- Pion Production Background ( $\pi^0 = 1$ ) (22.05%)
- Pion Production Background ( $\pi^0 > 1$ ) (20.77%)
- Beam Background (0.10%)
- Data
- MC

