



Contribution ID: 18

Type: **Individual Talk**

## Particle Trajectory Reconstruction and Euclidian Equivariant Neural Networks

*Tuesday, 22 August 2023 14:45 (25 minutes)*

Training neural networks to operate on three-dimensional trajectories from particle detectors is challenging due to the large combinatorial complexity of the data in three dimensions. Using networks that incorporate Euclidian Equivariance could prove to be very beneficial in reducing the need for data augmentation. Our focus is on data from neutrino experiments using liquid argon time projection chambers.

**Primary author:** ALTERKAIT, Omar (Tufts University)

**Presenter:** ALTERKAIT, Omar (Tufts University)

**Session Classification:** Session 2