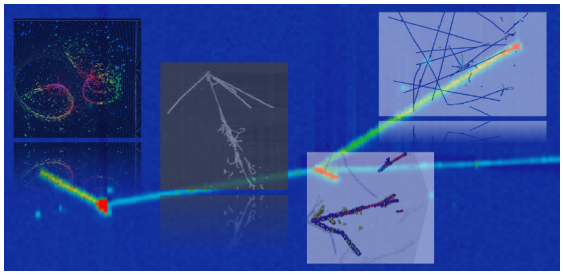

Contribution ID: **6** Type: **Individual Talk**

Connecting the Dots: Using Multidetector Inputs in Machine Learning

Wednesday, 23 August 2023 14:20 (25 minutes)

The DUNE experiment expects to make some of the most precise measurements of neutrino oscillation parameters by using a neutrino beam originating at Fermilab and measuring it at the Sanford Underground Research Facility (SURF). To accomplish this, novel techniques are being used in both the near- and far-detector designs. Notably, the Liquid Argon Time Projection Chamber (LArTPC) near-detector uses a unique modularized design. A subset of the design, a prototype 2x2 module, is undergoing testing at Fermilab and expects to take data this year using the same beamline that the full DUNE experiment will use. In addition, the MINERvA detector has been repurposed to be used both upstream and downstream of the prototype 2x2. This work outlines efforts that have been made to utilize input from both the 2x2 prototype and MINERvA detectors to accomplish machine learning identification of the particle interactions.

Primary author: MICALLEF, Jessie (IAIFI at MIT and Tufts)

Presenter: MICALLEF, Jessie (IAIFI at MIT and Tufts)

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