ExaTrkX & GPU acceleration with inference as-a-service
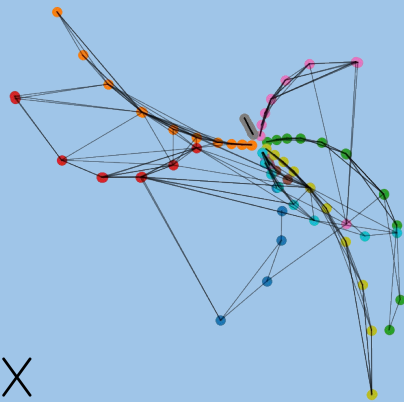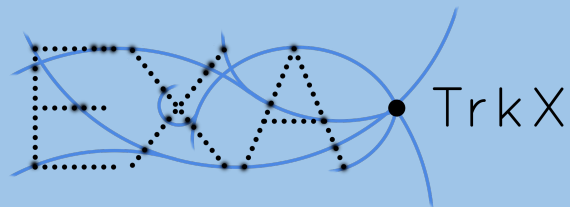
Yongbin Feng[1], Shie-Chieh Hsu[2], Xiangyang Ju[3], Alina Lazar[4],

(1) FNAL
(2) University of Washington A3D3
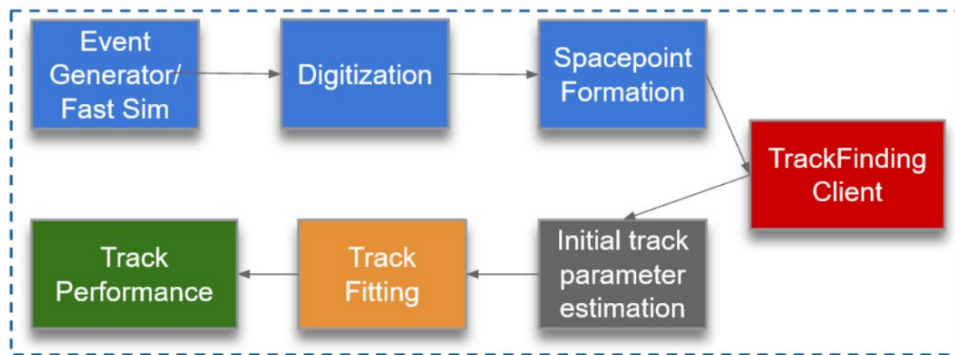(3) LBNL
(4) Youngstown University

May 31, 2022

Connecting the Dots 2022

ExaTrkX as a service

- Track finding takes majority of the tracking reconstruction time
- The GNN-based pipeline provides a promising acceleration by using the Graph Neural Network
- The idea is to run the pipeline on a "remote" server

ExaTrkX pipeline for track finding