

AI/ML for Particle Accelerator, X-Ray Beamlines and Electron Microscopy

Tuesday, 2 November 2021

Session III: Failure Detection, Virtual Diagnostics & Digital Twin (10:00 - 12:30)

-Conveners: John Power

time	[id] title	presenter
10:00	[12] Applications of Neural Networks for Anomaly Detection in Particle Accelerators	EDELEN, Jonathan
10:25	[13] Data-Driven Detection, Isolation, Identification, and Prediction of Accelerator Fault Events	TENNANT, Chris
10:50	[14] Adaptive Machine Learning for Control and Virtual Diagnostics of Time-Varying Particle Accelerator Systems and Beams	SCHEINKER, Alexander
11:15	[15] A Digital Twin for Spatiotemporal Experiments	SANKARANARAYANAN, Subramanian
11:40	[16] Uncertainty aware anomaly detection to predict errant beam pulses in the SNS accelerator	SCHRAM, Malachi
11:55	[17] Open / Speaker Panel Discussion	