4th ICFA Beam Dynamics Mini-Workshop on Machine Learning Applications for Particle Accelerators

Tuesday, March 5, 2024

Optimization & Control: Optimization & Control 1 (5:20 PM - 6:00 PM)

  -**Conveners: Tetsuhiko Yorita; Auralee Edelen**

time	[id] title	presenter
5:20 PM	[80] From Physics Study to Operations: Progress for Production Deployment of ML-Driven Beam Loss Optimization	ELLIOTT, Carrie
5:40 PM	[70] Machine Learning Tools for Heavy-Ion Linac Operations	MUSTAPHA, Brahim

Wednesday, March 6, 2024

Optimization & Control: Optimization & Control 2 (9:20 AM - 10:40 AM)

-Conveners: Auralee Edelen; Tetsuhiko Yorita

time	[id] title	presenter
9:20 AM	[16] Bayesian Optimization with Neural Network Prior Mean Models	BOLTZ, Tobias
9:40 AM	[19] Multi-task Bayesian optimization of laser-plasma accelerators	LEHE, Remi
10:00 AM	[24] A safe Bayesian optimization algorithm for tuning the optical synchronization system at European XFEL	EICHLER, Annika
10:20 AM	[2] From Simulation to Reality: Real-Time Control of Superconducting Linear Particle Accelerator using a Trend-Based Soft Actor-Critic Algorithm	SU, Chunguang

Optimization & Control: Optimization & Control 3 (11:10 AM - 11:50 AM)

-Conveners: Auralee Edelen; Tetsuhiko Yorita

time	[id] title	presenter
11:10 AM	[81] Machine learning to enhance XFEL operation at LCLS-II	ZHU, Zihan
11:30 AM	[23] Real-time Reinforcement Learning on FPGA with Online Training for Autonomous Accelerators	SCOMPARIN, Luca