14th Technical Meeting on Control Systems, Data Acquisition, Data Management and Remote Participation in Fusion Research / Programme

Thursday 18 July 2024

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Machine Learning (09:00 - 10:30)

-Conveners: Joshua Stillerman; Didier Mazon

time	[id] title	presenter
09:00	[85] Plasma control with artificial intelligence on EAST	XIAO, Bingjia
09:30	[81] Fast control of plasma vertical displacement based on robust adversarial reinforcement learning	Dr LIU, Binnuo
09:50	[103] AI/Machine Learning Enabled Advances with Real Time Control Validated on the DIII-D PCS	TANG, William
10:10	[122] Real-time estimation of line-averaged plasma density on EAST using LightGBM	WANG, Yucheng

Machine Learning (11:00 - 12:00)

-Conveners: Didier Mazon; Joshua Stillerman

time	[id] title	presenter
11:00	[88] Reconstruction of plasma equilibrium using physics-informed neural network on EAST	LIAO, Wenbin
11:20	[92] Identification of MHD modes on EAST using a deep learning framework	Prof. SHEN, biao
11:40	[113] Plasma Instability Events Identification and Disruption Prediction in EAST Based on Multi-Task Learning	JIA, yunhu

Machine Learning (13:40 - 14:40)

-Conveners: Didier Mazon; Joshua Stillerman

time	[id] title	presenter
13:40	[136] MDSplusML - Optimizations for data access to facilitate machine learning pipelines	STILLERMAN, Joshua
14:00	[101] Adaptive Anomaly Detection Disruption Prediction Starting from First Discharge	Mr AI, Xinkun
14:20	[90] Plasma optical boundary detection based on instance segmentation	ZHANG, Qirui