

Workshop on AI for Accelerating Fusion and Plasma Science

Wednesday, 29 November 2023

Posters Session - Conference Room 1 (CR1), C Building, 2nd floor (13:10 - 14:40)

[id] title	presenter	board
[186] Efficient generation of synthetic datasets for magnetic confinement fusion	KEATS, Abbie	
[189] Machine Learning Approaches in Plasma State Recognition: An Overview of the STARE	Mr MIDOU, Dorian Mrs ALMUHISEN, Feda	
[192] Predicting disruption in future tokamaks with fewer data by more physics-guided	SHEN, Chengshuo	
[170] Modeling, design and implementation of plasma vertical position controller using neural network in Damavand tokamak	Dr RASOULI, Hossein	
[208] A device-independent pipeline for benchmarking AI-driven disruption prediction models	CANNARILE, Francesco Dr BONOTTO, Matteo	
[174] FASTER : IA methods for fast and accurate turbulent transport prediction in tokamaks	FUHR, Guillaume	
[182] Multi-device dataset of infrared images for the control of thermal loads with machine learning	PUIG SITJES, Aleix	
[169] Recurrent neural network-based digital twin of ST40 tokamak dynamics: building system insight into model architecture	NEMYTOV, Vadim	
[184] Neural Network Surrogate for Acceleration of Gyrokinetic Codes	LANZARONE, Matisse	
[150] Optimization of local volume ignition targets	LI, Ze	
[172] Self-consistent time series tracking for phase difference and improved density profile reconstruction scheme on the KSTAR reflectometer	KIM, Boseong	
[190] Turbulent electric potential generation for particle trajectories integration	CLAVIER, Benoît	

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[155] Probabilistic modeling of signal intensity on the spectrograms of microwave reflectometry for the plasma diagnostics of electron density profile	OH, Dong Keun	
[165] Cross Tokamak Disruption Prediction with Different Methods and from Different Perspectives	ZHENG, Wei	
[185] Unsupervised learning and feature extraction of Alfvén activity in fusion plasmas	ZAPATA CORNEJO, Enrique	
[173] Reinforcement Learning for Rampdown Scenario Design and Active Disruption Avoidance	WANG, Allen	
[210] Development and analysis of AI tools for welding success rate prediction and the posterior output processing of PAUT applied to welding defects detection in the ITER VV manufacturing	ORTIZ DE ZUNIGA, Maria	
[151] Fast Plasma Tomography using De-convolutional and DNN methods	LI, Dong	
[175] EFIT-AI neural network surrogates for magnetic, MSE, and kinetic equilibrium reconstruction	Dr AKCAY, Cihan	
[159] Artificial intelligence for infrared image processing and comprehensive untangling of internal thermal scene at WEST	MITTEAU, Raphael	
[148] Plasma density raw signal prediction to duplicate feedback in tokamak control system to enhance reliability	LESHOV, Nikolai	
[183] Deep reinforcement learning for magnetic control on WEST	KERBOUA-BENLARBI, Samy	
[171] A new Neural Network Assisted CAD-based Analytical Real-Time Estimator (NACARTE) for photon dose assessment	BELOTTI, Mario	
[152] A machine learning approach to the inverse scattering problem	Mr VAGKIDIS, Christos	