B1-8-O1 Samuel Jackson UKAEA B1-8-O2 Riccardo Rossi Università degli Studi di Roma B1-8-O3 Bihao Guo Institute Of Plasma Physics Chinese Academy Of Sciences B1-9-I1 Yuya Morishita Kyoto University B1-9-I2 Azarakhsh Jalalvand Princeton University B1-9-I3 Zongyu Yang Southwestern Institute of Physics B1-9-I4 Yue Yu Institute of Plasma Physics, Chinese Academy of Sciences B1-9-O1 RYOTA YONEDA NTT Space Environment and Energy Laboratories B1-9-O2 Kai ZHONG Anhui University Huazhong University of Science and Technology B1-9-O3 Runyu Luo B1-10-I1 Mitsuru Honda Kyoto University B1-10-l2 Aaro Järvinen VTT B1-10-I3 Shinya Maeyama National Institute for Fusion Science B1-10-I4 Alex Panera Alvarez DIFFER B1-10-O1 Yong Xiao Zhejiang University B1-10-O2 Kotaro Fujii Nagoya University B1-10-O3 Shan Wei Shanghai Jiao Tong University B1-P1 Tatsushi Yano Osaka Metropolitan University Harbin Institute of Technology B1-P2 Yao Wang **B1-P3YUNFEI WANG** Institute of Plasma Physics, Chinese Academy of Science B1-P4 yubo zhang Institute of Plasma Physics, Chinese Academy of Sciences B1-P5 Kunal Singha Institute for Plasma Research B1-P6 Hayato Kawazome National Institute of Technology (KOSEN), Kagawa college B1-P7 Tomohide Suetsugu Kyushu University B1-P8 Ryusuke Hamada Hiroshima University B1-P9 Sami UI Hag NILOP C PIEAS B1-P18 Hong Wang Anshan Normal University Korea Advanced Institute of Science and Technology B1-P19 Woongil Ji B1-P20 Harune Sekido Nagoya University ISEE B1-P21 Xinyu Ge B1-P22 Nitish Ghosh Indian Institute of Technology Roorkee B1-P23 Jin Wook Kang KAIST B1-P32 Ziiie Liu Institute of Energy, Hefei Comprehensive National Science Center B1-P33 Emi Narita Kvoto University B1-P34 Yuita Shirasawa NTT Space Environment and Energy Laboratories B1-P40 Kun-Han Lee National Center for High-performance Computing, NIAR B1-P41 Suho Kim Department of Physics and Photon Science, GIST Huazhong University of Science and Technology B1-P42 Pengze Xiao VTT. Technical Research Centre of Finland B1-12-I1 Addam Kit B1-12-I2 Satoru Tokuda Kyushu University University of California, Irvine B1-12-I3 Xishuo Wei Huazhong University of Science and Technology B1-12-O1 YU ZHONG B1-12-O2 Chengshuo Shen Huazhong University of Science and Technology B1-12-O3 Sukma Wahyu Fitriani Kyushu University B1-12-O4 Tomovuki Murakami Seikei University

Towards Open Machine Learning Datasets for Fusion Research with Active Learning Integrating Deep Learning with Plasma Physics for Accurate and Reliable Multi-Diagnostic and Time-Constrained Inverse Problem Methodologies in Nuclear Fusion Overview of AI-based MHD events and disruption prediction on EAST tokamak Adaptive model predictive control of fusion plasma based on data assimilation system ASTI Al-Driven Advancements in Tokamak Diagnostics, Control, and Scenario Optimization Towards integrated and robust control: a unified fusion plasma status embedding based on Transformer and masked auto-encoder. Real-Time Detachment Forecaster: Decoding X-Point Radiation in Impurity-Seeded Plasmas Offline Reinforcement Learning by Decision Transformer for Tokamak Plasma Control The instability prediction of non-resonant energetic particle modes based on machine learning algorithms A Preliminary Investigation into the Prediction of Tearing Mode Evolution Using Deep Learning Transport model surrogates via Gaussian process regression Towards scalable large-scale model validation with data science Improvement of turbulent transport model using multi-fidelity data fusion approach Pellet Fueling: AI-Enhanced Surrogate Modeling and Integrated Modelling Al Surrogate Model for Turbulent Transport in Tokamak Plasmas Using Gyrokinetic Simulation Data and Machine Learning Causal relationship from multivariate time series and dominant scale for ITG<br/>br>turbulent transport Three-dimensional Radiation Reconstruction Based on X-ray Imaging via Convolutional Neural Network Unsteady evaluation method of heat flux on plasma-irradiated targets from long-discharge plasmas and accurate consideration of cooling effects Research of plasma multi-color imaging diagnosis based on metasurface Power balance analysis of high-parameter long-pulse discharges on EAST Study on fast deuterium ion physics based on neutron camera diagnostic technology for EAST high performance plasma experiment Understanding Nonlinear Capacitive Probe Response in Nonneutral Plasma Diagnostics Numerical study of He I 1s1S-2p1P radiation trapping in high-ambient gas pressure thermal arc plasma Measurement of spatial structures of fluctuations during the startup of tokamak <br>>plasmas in the PLATO tokamak by HIBP Self-absorption of He resonance line outside of the plasma Characterisation of magnetically confined laser induced copper plasma Simulation of device in low density plasma; From spacecraft to dust particle Electrostatic PIC simulation of low temperature plasma in cusp-shaped magnetic field for deuterium ion source Correction of Numerical Errors at Current Sources in Explicit Finite-Difference Time-Domain Method for Plasma Kinetic Simulations Suppressing numerical errors in higher-order Finite-Difference Time-Domain methods A detailed collisional radiative model for Ti plasma Calculation of two-dimensional electromagnetic fields in a Cylindrical Inductively Coupled Plasma Plasma electron density profile tomography for EAST based on integrated data analysis Empirical transport modeling for the edge region of H-mode plasmas for integrated simulations Identification of reduced-order models by sparse regression with oracle property Development of Digital Twin for Taiwan's First Spherical Tokamak (FIRST): Simulation, Diagnostics, and Integration Framework Correction of Beam Deflection Effects in Interferometry for Near-critical Density Plasma Diagnostics Numerical Simulation of Thermally Sustained Micro Discharge at Atmospheric Pressure by PIC/MCC-DSMC Coupled Method State representation learning of pedestal plasmas Utilization and development of Bayesian statistics in plasma physics The low-dimensional representation of Quasi-Helical stellarator geometry Disruption Prediction for Different Operational Phase Based on Disruption Budget Transferable and interpretable disruption prediction based on physics-guided machine learning Predicting Plasma-Deposited Thin Film Properties Using Machine Learning based on Optical Emission Spectroscopy Complex network analysis in plasma chemistry