



# 28th IAEA Fusion Energy Conference (FEC 2020)

## Tuesday 11 May 2021

### P2 Posters 2 (14:00-18:45)

[id] title	presenter	board
[1250] Machine learning approach to understand the causality between solitary perturbation and edge confinement collapse in the KSTAR tokamak.	LEE, Jieun	
[1299] Experiment and modelling of divertor detachment with deuterium injection in KSTAR H-mode plasmas	HWANG, Junghoo	
[872] ELM suppression sustained by $n = 1$ radiation-belt oscillations near the X point excited by divertor impurity seeding in EAST	XU, Guosheng	
[1246] Recent process in KSTAR long pulse operation	Dr KIM, Hyun-Seok	
[1025] Tokamak Disruption Event Characterization and Forecasting Research and Expansion to Real-Time Application	SABBAGH, Steven	
[1014] Stability of neoclassical tearing modes and their active stabilization in KSTAR	PARK, Young-Seok	
[1028] Experimental Investigation of the Excitation of Alfvén Eigenmodes and the Confinement of Energetic Ions during Sawteeth-like Oscillation in EAST	Dr XU, Ming	
[1066] In-situ leading edge induced thermal damages of melting and cracking on ITER-like W/Cu mono-blocks during long pulse operations in EAST	Mr ZHU, Dahuan	
[1276] In situ Study of Fuel Retention by Laser-Induced Breakdown Spectroscopy on the First Wall under Long-Pulse Operation of Experimental Advanced Superconducting Tokamak	Dr LI, Cong	
[1358] Hybrid Scenarios in KSTAR: Experimental Approach and Physics Understanding	NA, Yong-Su	
[1033] The geometry of ICRF – induced wave-SOL interaction: a multi-machine experimental review in view of ITER operation.	Dr COLAS, Laurent	
[1023] Operation in the quiescent regime with a high runaway electron current fraction on the EAST tokamak	ZENG, Long	
[1065] Exploration of RMP ELM control on ITER similar shape (ISS) in KSTAR	HAHN, Sang-hee IN, Yongkyoon	
[1499] [REGULAR POSTER TWIN] Synergy Between Divertor Geometry and Drifts on Divertor Power Dissipation in the DIII-D Small Angle Slot Divertor	Dr WANG, Huiqian	
[1497] [REGULAR POSTER TWIN] Achievements of Actively Controlled Divertor Detachment Compatible with Sustained High Confinement Core in DIII-D and EAST	WANG, Liang	
[1493] [REGULAR POSTER TWIN] Diverted negative triangularity plasmas on DIII-D: the benefit of High confinement without the liability of an edge pedestal	MARINONI, Alessandro	
[1478] [REGULAR POSTER TWIN] DIII-D and International Research Towards Extrapolating Shattered Pellet Injection Performance to ITER	SHIRAKI, Daisuke	
[1477] [REGULAR POSTER TWIN] Disruption mitigation by symmetric dual injection of shattered pellets in KSTAR	KIM, Jayhyun	

[1476] [REGULAR POSTER TWIN] Development and experimental qualification of novel disruption prevention techniques on DIII-D	BARR, Jayson	
[1475] [REGULAR POSTER TWIN] A novel path to runaway electron mitigation via deuterium injection and current-driven kink instability	PAZ-SOLDAN, Carlos	
[1464] [REGULAR POSTER TWIN] Edge Fluctuation Dynamics in RMP-Driven ELM Suppression and ELM-free H-mode Plasma in KSTAR	Dr LEE, Jaehyun	
[1461] [REGULAR POSTER TWIN] First demonstration of full ELM suppression in low input torque plasmas for ITER using n=4 RMP in EAST	Prof. SUN, Youwen	
[1462] [REGULAR POSTER TWIN] First Observation of ELM Suppression without Confinement Degradation due to Geodesic Acoustic Mode (GAM)-like mode Triggered by Boron Powder Injection	DIALLO, Ahmed	
[1457] [REGULAR POSTER TWIN] Toward holistic understanding of the ITER-like RMP ELM control on KSTAR	IN, Yongkyoon	
[1459] [REGULAR POSTER TWIN] Quasi-symmetric error field correction in tokamaks	PARK, Jong-Kyu	
[1458] [REGULAR POSTER TWIN] Integrated ELM and divertor flux control using RMPs with low input torque in EAST in support of the ITER Research Plan	LOARTE, Alberto	
[1456] [REGULAR POSTER TWIN] Predict First: flux-driven multi-channel integrated modelling over multiple confinement times with the gyrokinetic turbulent transport model QuaLiKiz	CITRIN, Jonathan	
[1447] [REGULAR POSTER TWIN] Interaction between energetic-particle-driven MHD mode and drift-wave turbulence based on global gyrokinetic simulation	ISHIZAWA, Akihiro	
[1450] [REGULAR POSTER TWIN] Turbulence suppression due to energetic particles: From first principles to gyrokinetic simulations and experimental observations	DI SIENA, Alessandro	
[1444] [REGULAR POSTER TWIN] New understanding of multi-scale/multi-field pedestal turbulence, transport, and gradient behavior during type-I ELMs on the DIII-D tokamak	BARADA, Kshitish Kumar	
[1443] [REGULAR POSTER TWIN] Development of an integrated core-edge scenario using the Super H-mode	WILKS, Theresa	
[1422] [REGULAR POSTER TWIN] Improving Fast-Ion Confinement and Performance by Reducing Alfvén Eigenmodes in the $q_{min} > 2$ , Steady-State Scenario	COLLINS, Cami	
[1417] [REGULAR POSTER TWIN] Towards integrated RF actuator modeling: whole device scale RF fullwave simulation including hot core and 3D SOL/antenna regions	Dr SHIRAIWA, Syun'ichi	
[1396] [REGULAR POSTER TWIN] Global JINTRAC Simulations for ITER PFPO Scenario Development	MILITELLO ASP, Elina	
[1395] [REGULAR POSTER TWIN] EAST Steady-state Long Pulse H-mode with Core-edge Integration for CFETR	GONG, Xianzu	
[1392] [REGULAR POSTER TWIN] Doubling the Efficiency of Off-axis Current Drive Using Reactor-relevant 'Top Launch ECCD' on the DIII-D Tokamak	CHEN, Xi	
[695] Verification and validation of plasma burn-through simulations in preparation for ITER First Plasma	Dr KIM, Hyun-Tae	
[968] A full-discharge tokamak flight simulator	Dr FABLE, Emiliano	
[1169] NBI heating modeling for Compass-Upgrade tokamak using NUBEAM code	Dr ZADVITSKIY, Georgiy	

[943] 3D full wave fast wave modeling with realistic HHFW antenna geometry and SOL plasma in NSTX-U	BERTELLI, Nicola	
[1063] Fluid, kinetic and hybrid approaches for edge transport modelling in fusion devices	Dr BORODIN, Dmitriy	
[1158] Extrapolation to JET-DT plasmas using a combination of empirical scaling and the ASCOT neutral beam heating code	SIREN, Paula	
[743] First-principle based multi-channel integrated modelling in support to the design of the Divertor Tokamak Test Facility	MANTICA, Paola	
[1116] Study of ITB formation and sustainment with optimized current profiles in the high-performance steady state plasma on EAST	Prof. LIU, HAIQING	
[1260] The electron-ion side asymmetry on striated heat flux induced by lower hybrid wave absorption in the SOL on the EAST	GAN, kaifu	
[1024] Development and Implementation of Integrated $q$ -profile+ $\beta_N$ Feedback Control Strategies for Access to Advanced Scenarios in EAST	Prof. SCHUSTER, Eugenio	
[677] Improved energy confinement triggered by non-axisymmetric magnetic field driven rotation braking in KSTAR	Dr KIM, Kimin	
[1248] Sustainable internal transport barrier discharges in KSTAR	Dr CHUNG, Jinil	
[960] Development of Quiescent H-mode Scenario with ITER-like Tungsten Divertor in EAST	QIAN, Jinping	
[917] H-mode Operation in He Plasmas with pure RF-Heating and ITER-like Tungsten Divertor on EAST	Dr ZHANG, Bin	
[994] Kinetic Equilibrium Reconstruction and Stability Analysis of KSTAR Plasmas Supporting Disruption Event Characterization and Forecasting	JIANG, Yanzheng	
[1240] Resolving the dispersion of plasma waves by measuring the modulation of electron cyclotron emissions	YUN, Gunsu	
[1214] Active Control of Toroidal Alfvén Eigenmodes Using the Electron Cyclotron Waves in KSTAR High-Performance Discharges	Dr KIM, Junghee	
[909] Propagation of radio frequency waves through turbulent plasmas	Dr RAM, Abhay	
[1173] Integrated analysis of high-performance scenarios for the favorable vertical stability plasma of HL-2M	Prof. XUE, Lei	
[926] Towards fully-predictive transport modelling in ASDEX Upgrade H-modes	Dr TARDINI, Giovanni	
[949] Simulation of Equilibrium, Stability, and Transport in Advanced FRCs	DETRICK, Sean	
[881] Towards a disruption-free plasma: challenges in designing a robust plasma termination phase for ITER	POLI, Francesca	
[699] Nonlinear Burn Control of ITER's Two-temperature Plasmas Using Optimal and Adaptive Allocation of Actuators with Uncertain Dynamics	GRABER, Vincent	
[638] Relativistic Electrons' Orbit Trajectory Calculation and Calculation Study analysis in Electron Cyclotron Heating and Current Drive of Tokamak Plasmas	Dr ALAM, Md Mahbub	
[959] Scenario Development and Exploration of Operating Space for CFETR Plasma	Dr CHEN, Jiale	
[701] Experimental validation of an integrated modelling approach to neutron emission studies at JET	ŠTANČAR, Žiga	
[710] Development of a Novel Integrated Model GOTRESS+ for Predictions and Assessment of JT-60SA Operation Scenarios Including the Pedestal	Dr HONDA, Mitsuru	
[1166] First-Principle-Based integrated modelling of multiple isotope pellet cycles at JET	Mr MARIN, Michele	

<b>[1146] Tungsten transport in tokamaks: towards real-time kinetic-theory-based plasma performance optimisation</b>	MANAS, Pierre	
<b>[1128] Predictive Multi-Physics Integrated Modelling of Tokamak Scenarios using the ITER Integrated Modelling and Analysis Suite (IMAS) in support of ITER Exploitation</b>	Prof. ROMANELLI, Michele	
<b>[704] Self-consistent predictive core-pedestal ITER scenario modeling*</b>	Dr RAFIQ, Tariq	
<b>[815] Assessment of Neutron Production during Pre-Fusion Operation of ITER</b>	POLEVOI, Alexei	
<b>[1165] Integrated Modelling &amp; Analysis Suite: Developments to Address ITER Needs</b>	PINCHES, Simon	
<b>[766] Quasioptical propagation and absorption of electron cyclotron waves from both numerical and experimental point of view</b>	YANAGIHARA, Kota	
<b>[1336] Burning Plasma Transport Simulation for Axisymmetric Tokamaks with Alpha-Particle Heating</b>	Mr MAURYA, Udaya	
<b>[679] Possible ways to suppress anomalous absorption at ECRH</b>	GUSAKOV, Evgenii	
<b>[1279] Current drive experiments in SST1 tokamak with Lower hybrid waves</b>	Dr SHARMA, Promod Kumar	
<b>[1298] Local density profiles of impurities in KSTAR and WEST plasmas by spectroscopic diagnostics and forward modelling</b>	SHIN, Haewon	
<b>[924] Model-Predictive Kinetic Control Experiments on EAST</b>	MOREAU, Didier	
<b>[906] Evidence of ITG/TEM Turbulence Transition Causing Edge Temperature Ring Oscillation for Sustaining Stationary I-Mode Plasmas</b>	Dr ZOU, Xiaolan	
<b>[676] Generation Mechanism and Characteristics of Intrinsic Rotation in KSTAR</b>	LEE, Sang Gon	
<b>[1068] Plasma-wall interactions during the helium plasma operation in EAST with a tungsten divertor</b>	Dr DING, Rui	