

28th IAEA Fusion Energy Conference (FEC 2020)

Thursday 13 May 2021

P6 Posters 6 (14:00-18:45)

| [id] title | presenter | board |
|---|--|-------|
| [1334] Energy confinement in W7-X, more than just a scaling law | FUCHERT, Golo | |
| [1082] Direct 2D measurements of parallel counter-streaming flows in the W7-X scrape-off layer for attached and detached plasmas | Mrs PERSEO, Valeria | |
| [855] Demonstration of real time wall conditioning and plasma control through impurity powder injection in LHD | NESPOLI, Federico | |
| [964] Radial electric field and density fluctuations measured by Doppler reflectometry during the post-pellet enhanced confinement phase in W7-X | ESTRADA, Teresa | |
| [984] Plasma radiation behavior approaching high-radiation scenarios in W7-X | Dr ZHANG, Daihong | |
| [905] Turbulent transport in the Scrape-Off Layer of Wendelstein 7-X | KILLER, Carsten | |
| [757] Steady-state sustainment of divertor detachment with multi-species impurity seeding in LHD | Dr MUKAI, Kiyofumi | |
| [740] Effect of Magnetic Configuration on Energy Confinement and Energetic-Particle-Driven MHD Modes in Heliotron J | Prof. NAGASAKI, Kazunobu | |
| [755] Assessment of W density in LHD core plasmas using visible forbidden lines of highly charged W ions | Dr KATO, Daiji | |
| [790] Turbulent Properties Against Hydrogen Isotope Ratio and Zonal Flow Activities in Heliotron J | OHSHIMA, Shinsuke | |
| [962] NBI-driven shear Alfvén waves in the presence of ECR heating and EC driven current in the TJ-II stellarator | CAPPA, Álvaro | |
| [1296] Experimental indications of high-recycling and the role of pressure and power dissipation for detachment at W7-X | Dr REIMOLD, Felix | |
| [680] 2D distributions of potential and density mean-values and oscillations in the ECRH and NBI plasmas at the TJ-II stellarator | Mr ELISEEV, Leonid | |
| [1577] Benchmarking and validating SOLPS-ITER, SOLEDGE2D and UEDGE for power exhaust modelling in future tokamaks | Dr SUBBA, Fabio | |
| [1501] [REGULAR POSTER TWIN] Overview of the results from the divertor experiments at Wendelstein 7-X and their implications for steady state operation | JAKUBOWSKI, Marcin | |
| [1496] [REGULAR POSTER TWIN] Confinement in electron heated plasmas in Wendelstein 7-X and ASDEX Upgrade; the necessity to control turbulent transport | BEURSKENS, Marcus Nicolaas Arnoldus | |
| [1492] [REGULAR POSTER TWIN] Performance Integration of High Temperature Plasmas in the LHD deuterium operation | TAKAHASHI, Hiromi | |
| [1491] [REGULAR POSTER TWIN] Transition between isotope-mixing and non-mixing states in hydrogen-deuterium mixture plasmas in the Large Helical Device | IDA, Katsumi | |
| [1442] [REGULAR POSTER TWIN] RMP induced H-mode transition during divertor detachment with enhanced edge radiation in deuterium plasmas in LHD | KOBAYASHI, Masahiro | |

| | | |
|--|-----------------------|--|
| [1441] [REGULAR POSTER TWIN] Developments towards an ELM-free DEMO pedestal radiative cooling scenario in ASDEX Upgrade | Dr KALLENBACH, Arne | |
| [1431] [REGULAR POSTER TWIN] First nonlinear full-f electromagnetic gyrokinetic continuum simulations of turbulence in tokamak scrape-off layer and pedestal | Mr HAKIM, Ammar | |
| [1429] [REGULAR POSTER TWIN] Gyrokinetic simulation in realistic divertor geometry reproduces density pump-out and enhanced electron heat confinement in tokamak edge plasma under resonant magnetic perturbations | HAGER, Robert | |
| [1421] [REGULAR POSTER TWIN] A Comprehensive Study of Energetic Particle Transport Due to Energetic Particle Driven MHD Instabilities in LHD Deuterium Plasmas | Dr OGAWA, Kunihiro | |
| [1401] [REGULAR POSTER TWIN] On Effect of n=2 RMP to Edge Pedestal in KSTAR with Nonlinear MHD Simulation | KIM, SangKyeun | |
| [1400] [REGULAR POSTER TWIN] Toroidal modelling of plasma response to RMP fields for HL-2M | Dr HAO, G.Z. | |
| [1399] [REGULAR POSTER TWIN] A nonlinear simulation study of the effect of toroidal rotation on RMP control of ELMs | Dr CHANDRA, Debasis | |
| [1398] [REGULAR POSTER TWIN] The simulations on the control of ELM and edge turbulence by RF waves in EAST H-mode discharges | XIA, Tianyang | |
| [948] Integrating tokamak-edge MHD-fluctuation modeling with transport | KING, Jacob | |
| [1315] Nonlinear Dynamics of Frequency Oscillation of Alfvén Eigenmodes in Toroidal Plasmas | Dr ZHANG, Wenlu | |
| [988] Flux driven pedestal formation in tokamaks: Turbulence simulations validated against the isotope effect | BOURDELLE, clarisse | |
| [996] Towards prediction of ELM control by RMP in ITER based on linear and quasi-linear plasma response | LIU, Yueqiang | |
| [860] 5D Continuum Gyrokinetic Simulations of the Electrostatic ITG Instability in Divertor Tokamaks | DORF, Mikhail | |
| [1108] Mitigation Effects of Fishtail Divertor on ELM Thermal Shock | Prof. ZHANG, Xiaodong | |
| [1247] Plasma-neutral momentum exchange and its applications to edge localized mode and toroidal rotation on tokamaks | Dr LEE, Kwan Chul | |
| [1134] Understanding the effects of super-X divertor configuration on optimizing operation space in DEMO | Dr XIANG, Lingyan | |
| [1314] Effect of pedestal impurity Li on ELMs during real-time Li powder injection studied by BOUT++ MHD model coupled with impurity module | Prof. JIZHONG, Sun | |
| [990] ELM burn-through simulations for MAST-U Super-X plasmas | SMITH, Siobhan | |
| [1125] Recent modelling of long-legged divertor configurations | MOULTON, David | |
| [937] Electromagnetic schemes in the global gyrokinetic PIC code XGC for higher-fidelity simulation of long-wavelength modes in the edge | SHARMA, Amil Y. | |
| [1093] Understanding reactor relevant tokamak pedestals | Dr HAM, Christopher | |
| [1056] Study of filament dynamics using synthetic and experimental BES diagnostics in the scrape-off layer | Mr ASZTALOS, Örs | |
| [1049] Non-linear MHD modelling of pellet triggered ELM in JT-60SA | FUTATANI, Shimpei | |
| [794] Impurity Transport in Ion- and Electron-Root Plasmas of Wendelstein 7-X | LANGENBERG, Andreas | |
| [1356] MHD calculations, microwave heating scenarios simulations and diagnostics updates on SCR-1 stellarator | Dr VARGAS, V.I. | |

| | | |
|--|-------------------------|----------|
| [715] Effects of partially installed tungsten coated divertor tiles on the LHD plasma and plasma-wall interactions | Dr MOTOJIMA, Gen | |
| [739] Observation of Nuclear Elastic Scattering Effect by Energetic Protons on Deuteron Slowing-Down Behavior in the Large Helical Device | MATSUURA, Hideaki | |
| [721] Distribution of the remaining tritium in the LHD vacuum vessel | Dr MASUZAKI, Suguru | |
| [940] Plasma-Surface Interaction in the Stellarator W7-X: Conclusion Drawn from Operation with Graphite Plasma-Facing Components | BREZINSEK, Sebastijan | |
| [1091] High-performance ECRH at W7-X: Experience and Perspectives | LAQUA, Heinrich | |
| [840] Magnetic configuration effects on turbulence driven transport from LHD and W7X identical experiments | TANAKA, Kenji | |
| [718] Investigation of isotope effect on energy confinement time and thermal transport in L-mode plasmas on LHD | Prof. YAMADA, Hiroshi | |
| [793] Study of NBI plasma start-up assisted by seed-plasma generation using non-resonant microwave heating in Heliotron J | KOBAYASHI, Shinji | |
| [712] Characterization and sparse modeling of radiation collapse and density limit in LHD | Mr YOKOYAMA, Tatsuya | |
| [1138] Physics Studies of Cryogenic Pellet and Tracer-loaded Pellet (TESPEL) Injections in the Stellarator TJ-II | MCCARTHY, Kieran Joseph | |
| [1071] Net parallel carbon rotation in the core of the Wendelstein 7-X stellarator: a deviation from neoclassical predictions? | Dr ALONSO , Arturo | |
| [936] Leveraging 3D magnetic topologies in support of long-pulse high performance plasma operation | Prof. LIANG, Yunfeng | |
| [835] Improved performance of ECRH by real-time deposition location control and perpendicular injection in LHD | Dr TSUJIMURA, Toru | |
| [733] RMP effect on slowing down of locked-mode-like instabilities in helical plasmas | TAKEMURA, Yuki | |
| [736] First neutral beam experiments on Wendelstein 7-X | Dr LAZERSON, Samuel | |
| [799] Theory-based models for the control of W7-X divertor plasmas | DINKLAGE, Andreas | |
| [803] Confinement and Equilibrium with Internal Islands in a Configuration Scan with respect to Iota in W7-X | GEIGER, Joachim | |
| [832] Isotope effects in internal transport barrier strength on Large Helical Device | KOBAYASHI, Tatsuya | |
| [1136] Sawtooth crash dynamics during ECCD operations at W7-X | Mr ZANINI, Marco | |
| [1031] Isotope effect, operational limits and Zonal Flows in the TJ-II stellarator | Dr HIDALGO, Carlos | |
| [800] Suppression of the energetic particle driven interchange mode in the Large Helical Device | Prof. OHDACHI, Satoshi | |
| [1538] Overview of first physics results from MAST Upgrade | Dr HARRISON, James | EX/P6-39 |
| [1537] Divertor detachment in ITER during application of resonant magnetic perturbations for ELM suppression | FRERICHS, Heinke | TH/P6-22 |
| [1541] Predictive dynamics of tearing modes for plasma stability in DT and TT scenarios considering JET Baseline and Hybrid discharges with mixture of isotopes | NOWAK, Silvana | TH/P6-23 |