TTF2018

23rd Joint EU-US Transport Task Force meeting

Poster Session:
Tuesday September 11

Fundamental turbulence understanding		
Poster 1	Janghoon Seo	Impurity effect on the ITG nonlinear transport
Poster 2	Sumin Yi	Role of parallel flow fluctuation in potential vorticity mixing and zonal flow generation in tokamak plasmas: A gyrokinetic simulation study
Poster 3	Mikhail Gryaznevich	Theoretical and experimental studies of confinement in high field Spherical Tokamak
Poster 4	Christopher Holland	Development of a Use Case Database for Validation and Predictive Modeling in the AToM SciDAC Project
Poster 5	Saeid Houshmandyar	Experimental Investigation of Stiff Electron Temperature Profiles at the Alcator C-Mod Tokamak
Poster 6	Alberto Mariani	Investigation of the role of ETGs in electron heat transport in TCV plasmas
Poster 7	Rachael McDermott	Development of NBI modulation experiments in the TCV tokamak
Poster 8	Juan Ruiz Ruiz	Validation of novel hybrid scale ETG simulations in NSTX via comparisons of simulated turbulence with a new high-k scattering synthetic diagnostic
Poster 9	Simon Freethy	Validation of ion-scale gyrokinetic simulations against measurements of turbulence amplitude and structure
Poster 10	Gary Staebler	Onsager Symmetric Closure for Linear Gyro-Landau Fluid Equations
Poster 11	Jorge Alcuson	Drift-wave instabilities in Wendelstein 7-X plasmas
Poster 12	Gavin Weir	Reflectometry and correlation ECE measurements in Wendelstein 7-X and comparison to electron heat transport measurements
Poster 13	Josefine Proll	Simulations for identifying microinstabilities in the recent operational phases of Wendelstein 7-X
Poster 14	Yan Sun	Systematic study of broadband turbulence properties in Ohmic, ICRH and LH sawteeth plasmas
Poster 15	Paola Mantica	Quasi-linear model validation against JET measurements and gyro-kinetic simulations
Poster 16	Sehoon Ko	Study on Characteristics of Turbulences in Tokamak Plasmas using Global Landau Fluid Simulation
Poster 17	Justin Ball	Optimized up-down asymmetry to drive fast intrinsic rotation in tokamaks
Poster 18	Peter Buxton	On the energy confinement time in Spherical Tokamaks: implications for the design of pilot plants and fusion reactors
Poster 19	Michele Romanelli	Electron Density Peaking Induced by Neon seeding in JET Hybrid Plasmas
Poster 20	Henri Weisen	Thermal equipartition and relations between electron, main ion and impurity ion temperatures
Poster 21	Alessandro Bortolon	Observations of transient ELM stabilization during modulated neutral beam injection in DIII-D

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Poster Session: Wednesday September 12

Effect of isotope mass on transport and confinement		
Poster 1	Henri Weisen	Isotope Dependence of Confinement in JET Deuterium and Hydrogen Plasmas
Poster 2	Gregory De Dominici	Isotopic effect on LH transition in flux driven non linear fluid simulations
Poster 3	Ephrem Delabie	Development of main ion CXS for ion heat and momentum transport studies on JET-ILW
Poster 4	Katsumi Ida	Effect of isotope mass on bulk ion particle transport in isotope mixture plasma
Poster 5	Jonathan Citrin	Fast isotope mixing in Ion Temperature Gradient driven turbulence
Poster 6	Michael Oberparleiter	Gyrokinetic studies of the isotope effect in JET-ILW H-mode discharges
Poster 7	Jens Juul Rasmussen	Simulations of isotope effects on the formation of the edge transport barrier and the L2H-like transition in magnetically confined plasmas
Poster 8	Nicola Bonanomi	Thermal transport in H and D JET L-mode plasmas
Poster 9	Costanza Maggi	Isotope identity experiments in H and D JET-ILW L-modes

Multi-channel core transport and integrated modeling		
Poster 10	Yanick Sarazin	Non local features of flux driven gyrokinetic simulations
Poster 11	Basil Duval	Toroidal rotation and low-Z impurity behaviour across sawteeth in TCV
Poster 12	Fabien Jaulmes	Optimization of q-profile towards high-fusion-performances at JET in preparation of DTE2 campaign
Poster 13	Teobaldo Luda	Integrated modelling of tokamak plasma confinement combining core and edge pedestal physics
Poster 14	Aaron Ho	Turbulent transport model validation at JET using integrated modelling enhanced by Gaussian process regression
Poster 15	Clarisse Bourdelle	Fast integrated simulation of WEST plasmas using METIS
Poster 16	Pierre Manas	Predictive integrated modelling of tungsten transport in AUG and WESTS
Poster 17	Albert Mollen	Numerical calculations of collisional impurity transport in stellarators
Poster 18	Karel van de Plassche	Using feed-forward neural networks in real-time capable turbulent transport modelling
Poster 19	Matthijs van Berkel	Can “hysteresis in flux” be reproduced by broadened power deposition profiles?

3D, RMP and MHD turbulence interplay		
Poster 20	Guanghai Hu	Non-axisymmetric Er×B shear inducing toroidally localized edge coherent mode with applied 3D field in EAST
Poster 21	Mike Martin	The Parallel Boundary Condition for Turbulence Simulations in Low Magnetic Shear Devices
Poster 22	Kimin Kim	Full orbit simulation of RMP enhanced fast ion loss and progress in gyrokinetic simulation of Alfvén instabilities in KSTAR
Poster 23	Judith Frank	A fluid model for the study of magnetic islands in a turbulent plasma including neoclassical physics
Poster 24	Arturo Alonso	Overview of transport studies in the first campaigns of the Wendelstein 7-X stellarator

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Poster Session:
Thursday September 13

Energetic particle transport and control techniques		
Poster 1	Miklos Porkoolab	Initial Measurements of Turbulence on W7-X with Phase Contrast Imaging
Poster 2	Elizabeth Tolman	Effect of magnetic field strength on Alfvén eigenmode stability
Poster 3	Sangil Lee	Avalanching fast ion losses in KSTAR and implications to energetic particle transport process
Poster 4	Fabian Manke	Intermittency in non-diffusive regimes of fast ion transport in turbulent toroidal plasmas
Poster 5	Claudio Di Troia	Collisional operator from non perturbative guiding center transformation

Towards plasma exhaust predictions for ITER and beyond		
Poster 6	Balazs Tal	Investigation of Inter-Elm burst in JET SOL
Poster 7	Ran Chen	Observations of the magnetic coherent mode induced poloidal redistribution of divertor particle flux in EAST
Poster 8	Livia Casali	The physics of neutrals and impurities in the new Small Angle Slot (SAS) divertor in the DIII-D tokamak
Poster 9	Fulvio Militello	Density and temperature profiles in the Scrape-Off Layer interpreted through filament dynamics
Poster 10	Raheesty Devi Nem	Comparison of Tokamak Plasma Mid-Plane with Divertor Conditions and Consequences for Modelling
Poster 11	Volker Naulin	Transport of impurities in a turbulence spreading transport model
Poster 12	Jose Boedo	Divertor Plasma Fluctuations during Detachment
Poster 13	Krzysztof Galazka	Chosen aspects of integrated modeling with COREDIV code for JT-60SA tokamak
Poster 14	Carrie Beadle	Scrape-off layer simulations in a Double Null magnetic configuration

L-H transition physics and plasma operation close to the threshold and Pedestal physics		
Poster 15	Pierre David	Pedestal confinement degradation in the vicinity of the H-mode density limit in ASDEX Upgrade
Poster 16	Guanghai Hu	Non-axisymmetric Er×B shear inducing toroidally localized edge coherent mode with applied 3D field in EAST
Poster 17	Antoine Merle	Influence of the instrument function on the reconstructed pedestal structure of TCV ELMy H-modes
Poster 18	Linming Shao	L-H transition and small amplitude oscillations triggered by sawtooth crashes at marginal heating power
Poster 19	Peter Manz	Gyrofluid simulations of electromagnetic turbulence in the plasma edge
Poster 20	Andreea Croitoru	Geometry-enhanced sheared flow in the L to H transition
Poster 21	Robert Brzozowski	A Geometric Model of Standard Neoclassical Orbit Loss and X-Loss with Integration into a Fluid Model