18th Technical Meeting on Energetic Particles in Magnetic Confinement Systems

Poster Session #1

Monday (March 17th)

Poster ID	Presenter	Title
P1.1	Pilar Cano	The impact of NBI fast-ion orbit losses on Er at the ASDEX Upgrade tokamak
P1.2	Ioannis Mavrogiannis	Uncertainty quantification and sensitivity analysis of the energy and particle sources from NBI in fusion plasmas
P1.3	Alex Reyner Viñolas	First simultaneous observation of co- and counter- current fast ion losses in the ASDEX Upgrade tokamak
P1.4	Daniil Kabirov	Interaction Between Alfvén Eigenmodes and Energetic Particle Driven Geodesic Acoustic Modes in Negative Triangularity Shaped Tokamak Plasmas
P1.5	Hao Wang	Prediction of EGAM profile using a physics-embedded machine learning method
P1.6	Jialei Wang	First-principle Simulations of Bursting and Non-Bursting Alfvén Waves in ICRF Heated Tokamak Plasmas
P1.7	Javier Hidalgo-Salaverri	Thermomechanical analysis of the conceptual design of the ITER FILD probe head
P1.8	Rafael Marques	Overview of the activities on the ITER fast-ion loss detector
P1.9	Joaquin Galdon-Quiroga	Feasibility study for a fast-ion loss detector and an imaging neutral particle analyzer for the DTT tokamak
P1.10	Javier Gonzalez-Martin	Final design of the JT-60SA fast-ion loss detector
P1.11	Lucía Sanchis	Neutronic analysis for a compact negative-triangularity based spherical tokamak fusion power plant
P1.12	Hanzheng Li	Verification and validation of the full orbit extension of energetic particle in MEGA code
P1.13	Shizhao Wei	Simulation of excitation of zonal structure by reversed shear Alfvén eigenmode with MEGA code
P1.14	Qinghao Yan	Self-organized States of AE and Zonal Modes
P1.15	Pietro Vincenzi	Definition of operational boundaries for ITER Neutral Beams due to energetic particle shine-through losses in the updated Research Plan scenarios
P1.16	Michael Fitzgerald	Global resonance and power transfer of fast particles with GAEs and CAEs with frequencies comparable to the gyrofrequency
P1.17	Fabio Camilo de Souza	LOCUST Predictions of Fusion Alpha-Particle Transport Due to Static 3D Magnetic Perturbations in ITER
P1.18	Ningfei Chen	Saturation of ZF with both thermal plasma nonuniformity and energetic paricles
P1.19	Yashika Ghai	Energetic particle transport in compact advanced tokamak reactor
P1.20	Haotian Chen	A Cylindrical Instability in Advanced Tokamak Plasmas
P1.21	Joona Sissonen	Recent Developments of ASCOT5 Orbit-following Test-Particle Code
P1.22	Ryosuke Seki	Synergetic effect of multiple fast ion species on fast ion driven instabilities in the Large Helical Device
P1.23	Jari Varje	Neutral beam injection driven Alfvenic modes and fast ion losses in ST40

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Poster Session #2

Tuesday (March 18th)

Poster ID	Presenter	Title
P2.1	Jacobo Varela Rodriguez	Effect of energetic particles in thermal plasma instabilities: consequences for burning and reactor relevant plasma
P2.2	Pablo Oyola	RF modified fast-ion distribution function in the full orbit description
P2.3	Enrique Zapata	Artificial Intelligence for the automatic identification of Alfvén activity and the generation of large databases
P2.4	Yaoning Zhang	Fast-ion losses induced by the far non-resonant components of RMP field and the related optimization
P2.5	Vadym Lutsenko	ICE driven by suprathermal particles in tokamak Ohmic discharges
P2.6	William Heidbrink	Dependence of ion-cyclotron range of frequencies instabilities on species mix and fast-ion distribution in DIII-D plasmas
P2.7	Minuk Choi	Fast-ion D-alpha spectrum measurements on the KSTAR tokamak
P2.8	Mirko Salewski	Inference of alpha-particle energy spectra by inversion of energetic-particle measurements
P2.9	Jose Rueda Rueda	Enhancements and characterization of the DIII-D energetic particle fluctuation bank
P2.10	Andrea Valentini	Orbit-space weight functions for two-step gamma-ray emission spectroscopy
P2.11	Clive Michael	Perpendicular FIDA measurements on MAST-U
P2.12	Matthew Thomas	Global calculation of shear Alfvén waves inside magnetic islands.
P2.13	Tommaso Barberis	Simplified model for nonlinear saturation of energetic-particle-driven modes limited by self-generated zonal modes
P2.14	Gyungjin Choi	Dilution effect on robustness of ExB staircase
P2.15	Daniel Crews	Asymmetric Alpha Particle Dynamics in the Z-Pinch: Current-Aligned versus Counter-Aligned Orbits
P2.16	Wataru Hayashi	Empirical study of Alfven eigenmodes and fast ions on the Large Helical Device
P2.17	Zhe Chen	Instability of high-frequency energetic particle-driven geodesic acoustic mode due to shaping effects-induced additional resonances
P2.18	Haider Rizvi	Predictive Simulations of Alfvén Eigenmode Destabilization in the KSTAR Tokamak Plasmas under the Upgraded Divertor Conditions
P2.19	Pengfei Liu	Global Gyrokinetic Simulations of Reversed Shear Alfven Eigenmode Driven by Energetic Particle in DIII-D plasmas
P2.20	Liqing Xu	First observation of energy transfer from fast ion to fast electron via resonant mechanism mediated by multiscale instabilities
P2.21	Youjun Hu	Gyrokinetic simulation of ITG turbulence with slowing-down distribution of α particles
P2.22	Felix Antlitz	Hybrid kinetic-MHD and gyrokinetic simulations of the fishbone instability using JOREK and ORB5
P2.23	Vinicius Duarte	Bridging between weakly and strongly driven quasilinear regimes with a convolutional resonance function
P2.24	David Zarzoso	Full-orbit description of energetic particle transport in the presence of ion temperature gradient turbulence

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Poster Session #3

Thursday (March 20th)

Poster ID	Presenter	Title
P3.1	Baolong Hao	Mode evolution of TAE due to alpha particles and synergy with ripple loss in CFETR
P3.2	Shrish Raj	Electromagnetic simulations of Toroidal Alfvén Eigenmode (TAE) using GYSELA
P3.3	Andres Bustos	AI session leader assistant prototype for the TJ-II device
P3.4	M. J. Hole	Interaction of Resonant Magnetic Perturbations with Energetic Particle Modes in KSTAR Plasmas.
P3.5	Xiang Zhu	Effect of neutral beam injection parameters on fishbone cycle frequency on the EAST tokam
P3.6	Peiwan Shi	Effects of electron cyclotron resonance heating on Alfvenic ion temperature gradient modes in the HL-2A plasma
P3.7	Ming Xu	Exploring the Relationship Between Reversed Shear Alfv\'en Eigenmodes (RSAEs) and Internal Transport Barrier (ITB) in EAST Experiments with $q_{min} \approx 2$
P3.8	Siriyaporn Sangaroon	Deuterium-Deuterium Neutron Spectroscopy in Neutral Beam-Heated Deuterium Plasmas on the Large Helical Device
P3.9	Fabio Camilo de Souza	GAM MHD spectroscopy in spherical tokamaks
P3.10	Garrett Prechel	Improving Fast-Ion Tomography with Transport Basis Functions
P3.11	Klara Bogar	Impact of Molecules on Edge Passive Fast-ion D-alpha Signals
P3.12	Rose Blyth	Reduced model for resonance overlap threshold governing fast ion transport by Toroidal Alfven Eigenmodes
P3.13	Pedro Pons-Villalonga	Characterization of the spatial structure of NBI-driven shear Alfvén waves in the TJ-II stellarator.
P3.14	Lars-Göran Eriksson	On the drive of vertical n_ϕ=0 modes by ICRF accelerated ions in tokamaks
P3.15	Javier Gonzalez-Martin	Hybrid kinetic-MHD modeling of alpha-driven TAEs in the SPARC tokamak
P3.16	CY Pan	Fast-ion Driven Alfvén Eigenmodes during ICRF Heated High βp Plasmas on EAST
P3.17	Leon Nichols	Investigating Alfven eigenmodes in SPARC and ARC scenarios using FAR3d
P3.18	Yevgen Kazakov	Advancing Alpha-Particle Physics: Insights from JET to JT-60SA in Support of ITER Rebaseline
P3.19	Hogun Jhang	On two fundamental guiding center motion of fast particles in strongly inhomogeneous magnetic fields: perpendicular gyro-averaging operation and parallel drift
P3.20	Zhiwen Cheng	Nonlinear saturation of reversed shear Alfvén eigenmode via high-frequency quasi-mode generation
P3.21	Kyle Callahan	Experimental investigation of Alfvén wave saturation by microturbulence induced fast ion scattering in DIII-D
P3.22	Jiabin Wan	Alpha particle transport induced by TAE in CFETR steady-state scenario
P3.23	Farah Atour	Nonlinear Interactions of Toroidal Alfvén Eigenmodes with Trapped Energetic Particles
P3.24	Alexandra LeViness	Fast ions losses from SPARC and ARC