Session Program

13-18 Oct 2025

30th IAEA Fusion Energy Conference (IAEA FEC 2025)

Posters 4

Thursday 16 October



[REGULAR POSTER TWIN] Foams as a Pathway to Energy from Inertial Fusion (FoPIFE): overview of recent results

[REGULAR POSTER TWIN] TARGETS DEVELOPED IN THE 21ST CENTURY AT THE P.N. LEBEDEV PHYSICAL INSTITUTE OF RAS TO STUDY THE EXTREME MATTER PHYSICS USING HIGH-POWER LASER FACILITIES

Speaker

Ms Nataliya Borisenko

[REGULAR POSTER TWIN] Observation of pedestal ion temperature screening of high-Z impurities in the hybrid scenario on DIII-D

Speaker

Tomas Odstrcil

[REGULAR POSTER TWIN] NON-INDUCTIVE CURRENT DRIVE AT ZERO LOOP VOLTAGE USING LHCD PAM LAUNCHER ON ADITYA-U

Speaker

Jagabandhu Kumar

[REGULAR POSTER TWIN] FIRST EDGE-LOCALIZED MODE SUPPRESSION WITH LOWER HYBRID WAVES ON THE EAST TOKAMAK

Speaker

Shaocheng Liu

[REGULAR TWIN POSTER] REAL-TIME FEEDBACK CONTROL OF RADIATION FRONT POSITION FOR DETACHMENT IN MULTI-DEVICE STUDIES: APPLICATION OF MACHINE LEARNING ON DIII-D AND KSTAR

Speaker

CheolSik Byun

[REGULAR TWIN POSTER] Drift flows impact island divertor operation in Wendelstein 7-X

Speaker

Carsten Killer

[REGULAR TWIN POSTER] Modelling divertor solutions for power exhaust: in-depth experimental validation in TCV

Speaker

Elena Tonello

Dual utilization of X-I and O-I ECCD for fully solenoid-free operations for a fusion reactor

Speaker Masayuki Ono

OPERATION SPACE OF OFF-AXIS ELECTRON CYCLOTRON CURRENT DRIVE AT HIGH DENSITY ON THE DIII-D TOKAMAK

Speaker Xi Chen

Effect of ECH on Energetic-Particle-Driven MHD Modes in Heliotron J

Speaker Prof. Kazunobu Nagasaki

Feasibility study of non-Maxwellian distribution Measurement using an oblique view in ITER electron cyclotron emission diagnostics

Speaker Dr Saeid Houshmandyar

ICRF ANTENNA DESIGN FOR THE HL-3 TOKAMAK

Speaker

Dr LingFeng Lu

LOWER DENSITY LIMIT FOR ACCESSING TO ELM SUPPRESSION USING N=4 RMP IN EAST

Speaker

Prof. Youwen Sun

USE OF SHIELDING BENCHMARK EXPERIMENT DATABASE (SINBAD) TO IDENTIFY NUCLEAR DATA STATUS AND GUIDE FUTURE EXPERIMENTAL ACTIVITIES

Speaker Ivan Kodeli

SIMULATIONS OF TAES IN NSTX-U

Speaker Elena Belova

EFFECT OF ELECTRON CYCLOTRON WAVES ON PLASMA WITH RUNAWAY ELECTRONS

Speaker

Pavel Aleynikov

Realization of direct internal recycling for DEMO fuel cycle based on a novel cryopump configuration

Speaker

Zhaoxi Chen

10-HZ LASER BEAM STEERING AND ILLUMINATION FOR FREE-FALL TARGETS

Speaker Kazuki Matsuo

Investigation of double frequency fishbone in EAST with neutral beam injection

Speaker Wei Shen

NATURAL SMALL ELMS ACHIEVED AT LOW PEDESTAL COLLISIONALITY (<1) IN A METAL WALL ENVIRONMENT ON EAST

Speaker Mr Y.F. Wang

IMPACT OF NEUTRAL PARTICLES ON BEAM-ION LOSSES IN EAST TOKAMAK

Speaker

zixin Zhang

Insights from fast-ion physics studies on JET in support of JT-60SA and ITER rebaseline

Speaker

Yevgen Kazakov

PROGRESS OF LOWER HYBRID CURRENT DRIVE EXPERIMENT TOWARDS LONG-PULSE OPERATION ON EAST

Speaker Miaohui Ll

INVESTIGATING LONG-DURATION PLASMA OPERATION WITH THE INTERNATIONAL MULTI-MACHINE DATABASE

Speaker

Dr xavier Litaudon

Challenges and Achievements in IFMIF-DONES Neutronics Activities

Speaker

Yuefeng Qiu

Recent Experiments and Development of LHCD system on HL-3

Speaker

Dr Xingyu Bai

Addressing Critical Tritium Challenges In Fusion Power Plants Using Spin-Polarized Fuel

Speaker

Jason Parisi

QUANTITATIVE EVALUATION OF BEAM LOSS BASED ON RADIATION DETECTION IN HIGH-DUTY BEAM COMMISSIONING OF LIPAC RFQ

Speaker

Kohki Kumagai

ENERGETIC PARTICLE DISTRIBUTIONS FOR QUANTITATIVE CALCULATIONS OF BURNING PLASMA STABILITY

Speaker

Simon Pinches

INVESTIGATION OF IMPURITY BEHAVIOUR IN THREE-ION ICRF SCENARIOS IN H-D AND D-T PLASMAS AT JET

Speaker Agata Chomiczewska

Control of energetic particle modes on the TCV tokamak

Speaker

Anton Jansen van Vuuren

ANALYSIS OF FAST ION DISTRIBUTIONS USING NEUTRON EMISSION SPECTROSCOPY IN NBI-ICRF SYNERGISTIC HEATING PLASMA ON EAST

Speaker Andong Xu

Burn Control in ITER by Maximization of Ion Cyclotron Power Absorption through Regulation of Helium-3 Concentration

Speaker

Vincent Graber

FIRST RESULTS OF EHO-LIKE FLUCTUATIONS STUDIES AT THE SPHERICAL TOKAMAK GLOBUS-M2

Speaker

Alexander Yashin

OBSERVATIONS OF FAST IONS TRANSPORT INDUCED BY FISHBONE USING A FAST ION LOSS DETECTOR ON HL-3 TOKAMAK

Speaker Mr Yuxiao Han

MEASUREMENT OF NUCLEAR REACTION CROSS-SECTION FOR THERMONUCLEAR APPLICATIONS

Speaker

Marina Bikchurina

STIMULATED BRILLOUIN SCATTERING AND FILAMENTATION INSTABILITIES IN HIGH TEMPERATURE PLASMAS

Speaker

Karima Bendib-Kalache

FAST ION TRANSPORT INDUCED BY EDGE LOCALIZED MODES

Speaker

Dr Haotian Chen

Drift-kinetic and fully kinetic simulations of plasma waves based on a geometric Particle-In-Cell discretization of the Vlasov-Maxwell system

Speaker

Guo Meng

THE EFFECT OF GAS PUFFING AT THE LH GRILL ON THE EFFICIENCY OF THE CENTRAL DENSE PLASMA ION HEATING AT THE FT-2 TOKAMAK

Speaker

Dr Denis Kuprienko

SINGLE MODE EVOLUTION IN WAVE-PARTICLE INTERACTIONS IN TOKAMAKS

Speaker

Ker Chung Shaing

OPENMC BASED SIMULATIONS FOR SHUTDOWN DOSE RATE ASSESSMENT IN THE DEMO FUSION REACTOR

Speaker

Roman Afanasenko

APPLICATION AND ANALYSIS OF THE REVISED ACCURATE WEIGHT METHOD FOR FUSION FACILITIES

Speaker Do Hyun KIM

Global Electromagnetic Symmetry-Breaking Effects on Momentum Transport and Current Generation in Tokamaks

Speaker Zhixin Lu

Evaluation of solid spherical fuel compression by comparison with simulation

Speaker Dr Ryunosuke Takizawa

OBSERVATION OF EDGE MAGNETIC ISLANDS AND 3D TURBULENCE STRUCTURE DURING RMP ELM SUPPRESSION

Speaker SeongMoo Yang

Fusion-Alpha-Enhanced Displacement and Stability of ITER Helical Core Plasmas

Speaker Panith Adulsiriswad Experimental profiles of Helicon wave power in the core of DIII-D plasmas

Speaker

Dr Satyajit Chowdhury

Alpha particle velocity space and orbit sensitivity of gamma-ray spectroscopy diagnostics based on the 10B(\alpha,p\gamma)13C reaction

Speaker

Massimo Nocente

Progress with commissioning the icrh system for the large optimized stellarator wendelstein 7-x

Speaker

Jozef ONGENA

Gyrokinetic simulations of pressure driven magnetohydrodynamic(MHD) instabilities in stellarator

Speaker

Pengfei Liu

Validation of Tungsten Nuclear Data Using the TUD-W benchmark

Speaker Fabbri Fabbri

Experimental study of EPM instability in the EAST off-axis region with elevated safety factor (q) value

Speaker Dr Ming Xu

Kinetic modeling of interactions among drift-Alfven instability, continuous spectrum and energetic particle in fusion experiments

Speaker Jian Bao

DESIGN-BASED MULTIDINENSIONAL TRITIUM TRANSPORT ANALYSIS PLATFORM FOR BLANKET SYSTEM

Speaker Yonghee Lee

RMP ELM CONTROL UNVEILS HIGH ION TEMPERATURE WITH ITB IN THE DIII-D TOKAMAK

Speaker

Qiming Hu

IMPACT OF LONG-TERM SIMULATIONS ON FAST ION RELAXATION IN STEADY-STATE ITER SCENARIOS

Speaker

Nikolai Gorelenkov

Explainable AI Reveals Growth of Instability For Forecasting ELM Onsets: Toward Multi-machine Predictions

Speaker

Dr Semin Joung

Laser-driven non-thermal aneutronic Proton-Boron fusion reactions in solid-density plasma

Speaker

Dr Shinsuke FUJIOKA

SUPPRESSION OF LOW-K TURBULENCE BY ALFVÉN EIGENMODES IN THE DIII-D TOKAMAK

Speaker Xiaodi du

OBSERVATION OF HIGH-FREQUENCY OSCILLATIONS IN THE TUMAN-3M OHMIC PLASMAS

Speaker

Dr Sergei Lebedev

Neutronics Analysis of EU DEMO Conducted at the Lithuanian Energy Institute

Speaker

Simona Breidokaite

INVESTIGATION OF FILAMENT DYNAMICS USING HIGH-SPEED VIDEO SHOOTING IN THE GLOBUS-M2 TOKAMAK

Speaker Dr Vladimir Timokhin

Radiation shielding analysis of IFMIF-DONES Test Cell and adjacent rooms

Speaker

Dr Arkady Serikov

Pressure gradient driven core-localized electromagnetic instability in the plasma with a weak magnetic shear on HL-2A tokamak

Speaker peiwan shi

EXPERIMENTAL UPDATE ON THE COUNTER-ILLUMINATING FAST IGNITION SCHEME USING THE KJ-CLASS ULTRA-INTENSE LASER LFEX

Speaker

Yoshitaka Mori

EFFECTS OF ZONAL FIELDS ON ENERGETIC-PARTICLE EXCITATIONS OF REVERSED-SHEAR ALFVÉN EIGENMODES

Speaker Ruirui MA

THE RESEARCH OF THE STABILITY OF REVERSED SHEAR ALFVÉN EIGENMODES EXCITED BY ENERGETIC PARTICLES IN HL-2A

Speaker Mr Wenyang Li

NEOCLASSICAL THEORY ON LOW FREQUENCY DRIFT ALFVÉN WAVES

Speaker Yang Li

The benchmark database of experiments, nuclear, and technological data for hybrid fusion systems with various types of blankets

Speaker Mikhail Shlenskii

Theoretical Model for the Experimentally Observed GAM's Satellites

Speaker Ekaterina Sorokina

NON-INDUCTIVE PLASMA START-UP USING ELECTRON BERNSTEIN WAVE MODE-CONVERTED FROM ELECTRON CYCLOTRON WAVE LAUNCHED FROM HIGH-FIELD SIDE ON SPHERICAL TOKAMAK, QUEST

Speaker

kazuaki Hanada

ACCELERATING DEVELOPMENT OF SUSTAINABLE FUSION REACTOR WITH TUNEABLE NEUTRON FIELD OF COMPACT ACCELERATOR-BASED NEUTRONS SOURCES

Speaker

Joven Lim

Progress on neutronics densign and analysis on fusion reactors in SWIP

Speaker

Dr Shen Qu

RADIOLOGICAL SAFETY ASSESSMENTS FOR FUSION NEUTRON SOURCE IN ENGINEERING DESIGN ACTIVITIES UNDER IFMIF/EVEDA PROJECT

Speaker

Shunsuke Kenjo

IN-SITU CALIBRATION OF NEUTRON FLUX MONITOR FOR HL-3 TOKAMAK

Speaker Guoliang Yuan

PHYSICS BASIS OF DISCREPANCIES BETWEEN TEMPERATURE MEASUREMENTS BY ECE AND THOMSON SCATTERING IN HIGH PERFORMANCE PLASMAS ON JET, EAST AND DIII-D

Speaker

Francesco Orsitto

STATUS OF THE DEVELOPMENT OF A TRITIUM FUEL CYCLE FOR LONG-TERM TOKAMAK OPERATION

Speaker

sergey ananyev

Comparative Neutronics Analysis of Three Structures of Helium - Cooled Blankets for Compact Fusion Reactors

Speaker

Ziqiang Zhao

EVOLUTION AND MITIGATION OF RUNAWAY ELECTRONS EMERGING DURING TOKAMAK PLASMA START-UP

Speaker Brett Chapman

ANALYSIS OF BACKGROUND PLASMA BEHAVIOR UNDER EXTERNAL FIELDS IN THE LOW ENERGY BEAM TRANSPORT SECTION OF LIPAC

Speaker

Tomonobu Itagaki

Noninductive Startup of Spherical Tokamak with Reduced Trapped Electrons by Electron Bernstein Wave Heating and Current Drive on LATE

Speaker Mr Masaki Uchida

AVERAGE MAGNETIC DRIFT MODEL FOR ION TEMPERATURE GRADIENT DRIVEN INSTABILITY IN TOKAMAKS

Speaker Baobao Jia

FEASIBILITY STUDY OF TUNGSTEN-WATER/AIR REACTION IN DEMO CONDITIONS

Speaker

Damiano Capobianco

NEUTRAL BEAM INJECTION FOR ELECTRON HEATING OF GLOBUS-M2 SPHERICAL TOKAMAK'S PLASMA

Speakers

Evgenii Kiselev, Olga Skrekel, Dr Petr Shchegolev, Vladimir Solokha

OBSERVATION OF NONLINEAR COUPLING OF WAVES EXCITED AT DISTINCT REGIONS OF OVERLAPPING DUAL LOWER HYBRID AND ION CYCLOTRON RESONANCES

Speaker

Hiroe Igami

ION AND ELECTRON HEATING VIA MAGNETIC RECONNECTION DURING MERGING/COMPRESSION PLASMA STARTUP IN ST40

Speaker Dr Hiroshi Tanabe

Experimental observations of magnetohydrodynamic instabilities in HL-3 low-current high-BN plasmas

Speaker

Liming Yu

Non-Inductive Current Start-up and Optimized Ramp-up in EXL-50U for Next-Generation Spherical Torus Devices

Speaker xinchen Jiang

HEATING D IONS TO OPTIMAL D-T FUSION ENERGIES WITH ICRF WAVES

Speaker

Dr Ernesto Lerche

Nonlinear saturation of toroidal Alfvén eigenmode via ion induced scattering in nonuniform plasmas

Speaker Mr Zhiyong Qiu

Hybrid simulation of Alfvén eigenmodes caused by multiple fast ion species in the Large Helical Device

Speaker RYOSUKE SEKI

A New Eigenvalue Solver for Electrostatic Drift-Wave Instabilities in Tokamaks

Speaker

Jie Wang

10-HZ-INJECTION AT A LASER FOCUS OF TARGETS ACCELERATED INTO SPRING-HTSC-MAGLEV SYSTEM

Speaker

Prof. Elena Koresheva

STUDY OF FAST ION TRANSPORT AND LOSSES DURING ALFVÉN TYPE MHD INSTABILITIES AT GLOBUS-M2
Speaker Olga Skrekel
Observation of non-collisional ion heating in helical plasmas under dominant electron heating condition by neutral beam injection on LHD
Speaker Kazuo Toi
THE STUDY OF ALFVÉN EIGENMODES ON THE SPHERICAL TOKAMAK GLOBUS-M2 USING DOPPLER BACKSCATTERING
Speaker Anna Ponomarenko
Verification and Validation of Global Gyrokinetic Simulations of Alfvén Eigenmodes in Spherical Tokamaks

18:10

Henry Hingyin Wong, Prof. Zhihong Lin

10