

7-10 April 2025, Prague

PROGRAM













Sunday 6 April

Monday 7 April

8:00	Registration opened (whole day)	
8:30	Opening presentation	
8:50	Opening presentation	
8:50 9:00	Introduction by chair of the ISC	
9:00		
9:45	PLENARY (45 min)	
9:45		
10:15	INVITED (30 min)	
10:15	ORAL (20 min)	
10:35		
10:35	Coffee break	
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11:10	INVITED (30 min)	
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11:40 12:00	ORAL (20 min)	
12:00		
12:20	ORAL (20 min)	
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12:40	ORAL (20 min)	
12:40	Lunch	
14:00		
14:00 14:30	INVITED (30 min)	
14:30 15:00	INVITED (30 min)	
15:00		
15:20	ORAL (20 min)	
15:20	Poster	
	Coffee break	
17:00		
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17:50	ORAL (20 min)	
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18:10	ORAL (20 min)	
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8:50 9:00	GENERAL INFORMATION	
9:00 9:45	PLENARY (45 min)	
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10:15 10:35 10:35 11:10	ORAL (20 min)	
	Coffee break	
11:10 11:40	INVITED (30 min)	
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15:20	Poster	
	Coffee break	
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17:50 18:10		
18:10 18:30	ORAL (20 min)	
	BREAK	
19:30	CONFERENCE DINNER	
23:30		

17:00

Registration and welcome reception

19:00

Plenary talks: 45 min including discussion Invited talks: 30 min including discussion Oral talks: 20 min including discussion

<u>Tuesday 8 April</u>

Wednesday 9 April

Thursday 10 April

8:50	GENERAL INFORMATION		
9:00	INFORMATION		
9:00 9:45	PLENARY (45 min)		
9:45 10:15	INVITED (30 min)		
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10:35	ORAL (20 min)		
10:35	Coffee break		
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14:00	Lunch		
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15:20	Poster		
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17:00			
17:00	ORAL (20 min)		
17:20			
17:20	ORAL (20 min)		
17:40 17:40			
17:40	ORAL (20 min)		
18:00			
18:30	GROUP PICTURE		
18:30	COMMITTEE		
19:30	REUNION		
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8:50	GENERAL	
9:00	INFORMATION	
9:00	PLENARY (45 min)	
9:45		
9:45 10:15	INVITED (30 min)	
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10:35	ORAL (20 min)	
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11:10	Coffee break	
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12:50	ORAL (20 min)	
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13:30		
13:30	Lunch	
15:00		
16:00	Visits of Institute of Plasma Physics of the Czech Republic	

Plenary talks: 45 min including discussion Invited talks: 30 min including discussion Oral talks: 20 min including discussion

SUNDAY 6 APRIL

17:00 – 19:00 WELCOME RECEPTION AND REGISTRATION Registration will be possible every day at the conference desk.

MONDAY 7 APRIL

08:00 REGISTRATION OPENING AT THE CONFERENCE DESK

08:30 OFFICIAL OPENING PRESENTATION

Session 1

Chairpersons: D. Mazon, T. Akiyama

- 09:00 P1 C. Sozzi Diagnostics for large tokamaks: from JET to JT-60SA
- 09:45 I1 M. Kocan Progress on ITER diagnostics
- 10:15 O1 P. Bilkova Diagnostics for COMPASS Upgrade tokamak

10:35 – 11:10 COFFEE BREAK

Session 2

Chairpersons: M. Feroci, G. Cristoforetti

- 11:10 I2 L Hayes The Flaring Sun: X-ray Diagnostics of Solar Flares with Solar Orbiter
- 11:40 O2 A. Goussarov Long term operation of the Fibre Optics Current Sensor at JET
- 12:00 O3 J. Feng Optical emission spectroscopy diagnostics of novel DCSBD linear jet plasma system
- 12:20 O4 –B. Tosto Fast evaluation of the Fast-Ion Dα spectroscopy measurements at the ASDEX Upgrade tokamak

12:40 – 14:00 LUNCH IN DUO HOTEL

Included in the conference fee

Session 3

Chairpersons: G. Cristoforetti, J. Cavalier

- 14:00 I3 H. Akatsuka Optical Emission Spectroscopic Measurement of Atmospheric-Pressure Plasma by Continuum and Line Emissions with Collisional Radiative Model
- 14:30 I4 M. Geissel Using High-Performance Cameras for Advanced Plasma Diagnostics
- 15:00 O5 R. Agnello Insights from Beam Emission Spectroscopy in SPIDER in multi-beamlet configuration

15:20 – 17:00 POSTER SESSION 1

Session 4

Chairpersons: K. Sasaki, S. Starikovskaia

- 17:00 I5 E. Wagenaars Measuring atomic radicals in atmospheric-pressure plasmas
- 17:30 O6 Y. Cheng First observation of line emissions from W46+ ions at 7-8 Å by Extreme Ultraviolet Spectrometers in Experimental Advanced Superconducting Tokamak with full tungsten diverto
- 17:50 O7 J. Fujera Advanced analysis of overlapping molecular spectra to determine vibrational distributions of excited electronic states of N2, N2+ and NO
- 18:10 O8 L. Lobanova Plasma-chemical mechanism of surface destruction of the diagnostic system components inside EAST vacuum vessel

TUESDAY 8 APRIL

08:50 GENERAL INFORMATION OF THE DAY

Session 5

Chairpersons: M. Tatarakis , M. Simek

- 09:00 P2 A. Gerakis Non-resonant four wave mixing techniques for the thermodynamic characterization of neutrals, ions, electrons and nanoparticles in a gas discharge
- 09:45 I6 V. Malka ELI NP status and challenges
- 10:15 O9 I. Tazes Experimental observation of Magnetic Vortex Accelerated ions by femtosecond laser interaction with optically shaped gaseous targets in the near critical density plasma regime

10:35 - 11:10 COFFEE BREAK

Session 6

Chairpersons: L. Hu, D. Mazon

- 11:10 I7 A. Jalalvand Leveraging AI for Resilient Fusion Plasma monitoring and Control: Mitigating Failures and Enhancing Diagnostic
- 11:40 O10 H. Wu Bayesian integrated estimation of tungsten impurity concentration distributions at WEST using soft X-ray and bolometer diagnostics
- 12:00 O11 M. Carrard Real-time reflectometry for control experiment in tokamak plasma
- 12:20 O12 F. Wang High spatiotemporal resolution two-dimensional shock wave diagnosis technology based on compressive sensing and neural network technology

12:40 – 14:00 LUNCH IN DUO HOTEL

Included in the conference fee

Session 7

Chairpersons: M. Dimitrova, K. Sasaki

- 14:00 I8 J. Adamek Advances in Plasma Diagnostics: 20 Years of the Ball-Pen Probe in Fusion and Non-Fusion Research
- 14:30 I9 H. Hoeft Synchronised fast optical and electrical diagnostics for pulsed-driven atmospheric pressure discharges
- 15:00 O13 M. Zuin A small-scale experiment for Langmuir wave study in a laboratory plasma, a model for solar wind

15:20 – 17:00 POSTER SESSION 2

Session 8

Chairpersons: F. Wang, P. Bilkova

- 17:00 I10 C. Zhou Multi-scale turbulence measurement by integrated backscattering, forward scattering and cross-polarization scattering of Doppler reflectometer
- 17:30 O14 G. Fuchert In-situ spectral calibration from plasma measurements of the W7-X Thomson scattering diagnostic
- 17:50 O15 X. Zhao Angular-resolved scattered light diagnostics for laser-plasma instability studies in inertial confinement fusion
- 18:10 O16 D. Elliott Design and commissioning of the optical diagnostic suite for the Material Plasma Exposure eXperiment: optimization for steady-state operations and high heat flux

19:30 CONFERENCE DINNER – RESTAURACE HYBERNSKA

Address: Dlážděná 1003/7, 110 00 Prague 1

WEDNESDAY 9 APRIL

08:50 GENERAL INFORMATION OF THE DAY

Session 9

Chairpersons: L. Hayes and M. Feroci

- 09:00 P3 K. Ida Development of hyperspectral camera for auroral imaging (HySCAI)
- 09:45 I11 D. Kraus X-ray diagnostics of dense plasmas relevant to stellar interiors and inertial fusion energy
- 10:15 O17 A. Laso Garcia Solid Density Plasmas Diagnotics at the HED-HiBEF Instrument at EuXFEL

10:35 - 11:10 COFFEE BREAK

Session 10

Chairpersons: M. Zuin, L. Hu

- 11:10 I12 A. Dal Molin Measurement of the Gamma-Ray-to-Neutron Branching Ratio for the Deuterium-Tritium Reaction in Magnetic Confinement Fusion Plasma
- 11:40 O18 L. Liao A scintillating-fiber detector for the deuterium-deuterium fusion-born triton confinement study in EAST tokamak
- 12:00 O19 R. Yamada Thermal neutron imaging for laser-driven neutron sources
- 12:20 O20 Y. Arikawa Pico second time resolution neutron detector for burning plasma measurement on inertial confinement fusion

12:40 – 14:00 LUNCH IN DUO HOTEL

Included in the conference fee

Session 11

Chairpersons: M. Simek, G. Dilecce

- 14:00 I13 S. Starikovskaia "Gradient" discharge for plasma-assisted detonation: controlled production of gradient of radicals
- 14:30 I14 E. Hume Characterization of electrons in intense laser-plasma interactions, both utilizing solid and gas targets
- 15:00 O21 S. Irimiciuc Selective acceleration and gas phase chemistry during expansion of laser-produced oxide and nitride plasma via angle- and time-resolved electrical diagnostics

15:20 – 17:00 POSTER SESSION 3

Session 12

Chairpersons: M. Zuin, I. Duran

- 17:00 O22 P. Turjanica Innovative Magnetic Field Sensors for Fusion Reactors: Harnessing the Thick Printed Copper Technology
- 17:20 O23 Q. Xiao The influence of magnetic field and plasma on the diagnosis of wall material by LIAS in HIT-PSI device
- 17:40 O24 L. Gottardi Diagnostic of magnetically confined plasmas with superconducting transition edge sensors

18:00 GROUP PICTURE

18:30 SCIENTIFIC COMMITTEE REUNION

Closed session reserved to members of the international scientific committee.

THURSDAY 10 APRIL

08:50 GENERAL INFORMATION OF THE DAY

Session 13

Chairpersons: E. Hume, D. Batani

- 09:00 P4 M. Gatu Johnson Development of an inertial confinement fusion platform to study nuclear reactions relevant to nuclear astrophysics
- 09:45 I15 D. Verscharen In-situ measurements of space plasma: recent progress and future challenges
- 10:15 O25 J. Xiao First Experimental Results of Multi-physics Parameter Diagnosis in a MA-class Dense Plasma Focus

10:35 – 11:10 COFFEE BREAK

Session 14

Chairpersons: T. Akiyama, F. Wang

- 11:10 I16 I. Abramovic Advancing Synthetic Diagnostics for Plasma Control and Pulse Planning in SPARC
- 11:40 Prize award Y. Wan Exploring the key subtleties: a powerful tool for probing laser-plasma wakefield dynamics
- 12:10 O26 K. Munechika Synthetic framework for ITER bolometer performance assessment
- 12:30 O27 F. Federici Improved performance of IRVB foils to image low- to moderate-temperature plasma radiation
- 12:50 O28 J. Zhao Development of the 18MJ pulsed power system of SPERF

13:10 CONFERENCE CLOSURE AND STUDENT PRIZE AWARD

13:30 – 15:00 LATE LUNCH IN DUO HOTEL***

Included in the conference fee

*** Lunch boxes available for those leaving early. Register at the welcome desk in advance.

16:00 – 18:00 VISIT OF IPP (COMPASS Upgrade tokamak and PALS laboratoriy)

Registration at the conference desk. <u>Address:</u> U Slovanky 1746/1, 182 00 Prague 8

Poster session 1

Monday 7 April, 15:20 - 17:00

P1.1: Vladimír Weinzettl, Design of the soft *X*-ray spectrometer for observing high-*Z* elements at the full-metal COMPASS Upgrade tokamak

P1.2: Miglena Dimitrova, Embedded-probe diagnostics for the COMPASS-U tokamak

P1.3: João Figueiredo, *EUROfusion Diagnostic Enhancements and R&D in support of ITER research plan priorities*

P1.4: Maxime Brasseur, Atomic data for Os VI spectral lines of interest to nuclear fusion research from independent computational approaches

P1.5: Gabriele Partesotti, *Measurements of divertor radiated power from the W7-X imaging bolometer diagnostic*

P1.6: Igor Nedzelskiy, *RFA DC operation in configuration without impact of secondary electron emission on the ion temperature fluctuations measurements*

P1.7: Tomas Markovic, Magnetic diagnostic sensors for hot wall tokamak COMPASS Upgrade

P1.8: Sushil Kumar Singh, *Experimental observation of quasi-mono energetic electrons at the sub-relativistic laser intensities*

P1.9: Aleš Havránek, *Progress in development of ultra-fast soft X-ray sensorics for spectral monitoring of high-temperature plasmas*

P1.10: Mahdi Mahjour, Design and Fabricate a Novel Mix-Probe Diagnostic System for Multi-Parameter Plasma Edge Turbulence Measurements in the Ir-T1 Tokamak

P1.11: Petr Bílek, *Molecular Hydrogen Continuum under Nanosecond Pulse Discharge Conditions*

P1.12: Frank Rosmej, Analysis of velocity gradients inside dense heated titanium foils via space resolved H-like Lyman-alpha X-ray line formation

P1.13: Weixing Ding, Development of Cotton-Mouton Effect Interferometer on EAST

P1.14: Sara Molisani, *Design of a diagnostic system to evaluate the ion velocity distribution function at the plasma edge of RFX-mod2*

P1.15: Pascal Devynck, IRBO, a new X/UV bolometer based on IR detection

P1.16: Tullio Barbui, Novel soft x-ray multi-energy camera to study thermal plasmas at WEST

P1.17: Slavomir Entler, Electronics for ITER steady-state magnetic field sensors

P1.18: Marie Vanakova, Accuracy of the plasma equilibrium reconstruction of COMPASS Upgrade

P1.19: Federico Guiotto, *Development of a GEM based diagnostic for soft X-ray measurements resolved in space, time, and energy at RFX-mod2*

P1.20: Giulia Marcer, *Performance assessment of a multiple lines of sight gamma ray spectrometer for deuterium-tritium fusion power measurement at ITER*

P1.21: João Oliveira, A real-time data acquisition system for the magnetic diagnostic of COMPASS-*U*

P1.22: Duccio Testa, *Conceptual design and prototyping of inductive magnetic sensors using photo-lithography processes: the JET DTE3 experience*

P1.23: Liutian Gao, Observation of $E \times B$ flow and fluctuations associated with fishbone instability on EAST

P1.24: Simone Lorenzo Fugazza, Validation of TRANSP simulations of the fast deuterium beam distribution in D3He plasmas from (D)-(DNBI)-(3He) three-ions scheme experiments at JET

P1.25: Federico Ruffini, *G3C*: *a plasma position reconstruction algorithm based on reflectometric measurements*

P1.26: Xiang Han, Measurement of charge exchange emission at plasma edge using a novel detector assembly on Wendelstein 7-X

P1.27: Enrico Panontin, Gamma-ray emission on SPARC for burning plasma diagnosis

P1.28: Dario Cipciar, *First results on fast measurements of ion and electron temperatures with Ballpen probes in the SOL of Wendelstein 7-X*

P1.29: Sebastian Hoermann, Fast helium beam diagnostic to characterise plasma dynamics at W7-X

P1.30: Michael Goddijn, *Femtosecond Two-photon-Absorption Laser-Induced Fluorescence diagnostic on the RAID linear device*

P1.31: Petr Hoffer, Electric field-induced second harmonic generation at 532 nm in various media

P1.32: Pooja Devi, Filter Stack Spectrometer for Laser-Plasma Interaction Studies

P1.33: Lifeng Yang, Real-time Data Cleaning of EAST Tokamak Density Diagnostic Data Based on Machine Learning

P1.34: Nicola Lonigro, *Localizing CIII emission using multi-delay coherence imaging in the W7-X divertor*

P1.35: Marco Zanini, Motional Stark Effect modelling and measurements at Wendelstein 7-X

P1.36: Tsuyoshi Akiyama, Impact of Environmental Factors on ITER Toroidal Interferometer and Polarimeter (TIP) Measurements

P1.37: Koichi Sasaki, Doppler-broadened laser absorption spectroscopy at hydrogen Balmer-alpha line for estimating sheath electric field in plasmas

P1.38: James Milnes, Saturation mitigation strategies in microchannel plate photomultiplier tubes

P1.39: Jakub Seidl, *Improved Accuracy of Thomson Scattering System at COMPASS via Bayesian Error Correction and Machine Learning*

P1.40: Kentaro Sakai, Design of Thomson scattering spectrometer to measure non-Maxwellian electron distribution functions in the Compact Helical Device

P1.41: Vincent Masson, *Developments in phase-contrast imaging on TCV for electron-scale fluctuation measurements*

P1.42: Wenxiang Shi, 2D Full Wave Simulation of Scattering Process for Doppler Reflectometer

P1.43: Pengjun Sun, Development of 270 GHz Microwave Forward Scattering System on the Experimental Advanced Superconducting Tokamak (EAST)

P1.44: Henry Gould, *Electron Temperature Measurements with Multi-color SXR Ratio Diagnostics on LM26 Plasma Compressions*

P1.45: Sahar Arjmand, Diagnostics of Low-Temperature Plasma in Dielectric Capillaries for Laser Wakefield Acceleration

Poster session 2

Tuesday 8 April, 15:20 – 17:00

P2.1: Ichihiro YAMADA, Initial results of new 9-channel and 12-channel polychromators of the LHD Thomson scattering system

P2.2: Alexandru Boboc, *Diagnostics approach for Spherical Tokamak for Energy Production (STEP) power plant*

P2.3: Chi Lei, Advancement of gas puffing imaging diagnostic on J-TEXT tokamak

P2.4: Peng Shi, Conceptual design of collective Thomson scattering system for a burning plasmatokamak

P2.5: Corinne Desgranges, WEST VUV spectrometers : results and enhancement project

P2.6: Michael Komm, Assessment on the swept Langmuir probes capability to measure low electron temperatures in fusion plasmas

P2.7: Georg Schlisio, Application of novel mass spectrometry techniques for exhaust monitoring in the Wendelstein 7-X divertor by means of a high resolution spectrometer and an enhanced optical gas analyzer

P2.8: Jakub Svoboda, *Modelling two foil method for COMPASS-U tokamak and its generalisation for tungsten density estimation*

P2.9: Tomu Hisakado, *Development of a wide bandwidth heterodyne dispersion interferometer for electron density measurement of atmospheric pressure plasmas*

P2.10: Zhoujun Yang, Development of Enhanced Scattering diagnostic on J-TEXT

P2.11: Haoxi Wang, Results of the HL-3 three-wave FIR Polari-Interferometer on plasma density and magnetic field distribution

P2.12: Yuyang Liu, *Design and bench testing of a two-color interferometer system on the EAST tokamak*

P2.13: Vlastimil Dědek, *Energy Spectra Shifts of Escaping Neutrals Caused by the Plasma Rotation*

P2.14: Filipe da Silva, Advancing Fusion Research: SPEKTRE Platform and VOPOO Diagnostic for Plasma Edge Analysis and Turbulence Control

P2.15: Petr Bohm, *New polychromators for COMPASS-U Thomson Scattering diagnostic system - optimization of the filter set*

P2.16: Matěj Ivánek, *Instrumented high fluence neutron irradiation test of antimony Hall sensors – experimental setup and the first results*

P2.17: Guoliang Yuan, Development of diamond neutron energy spectrum diagnostics on HL-3tokamak

P2.18: Howel Larreur, Differentiation of alpha particles from carbon ions using various types of solid-state nuclear track detectors

P2.19: Christos Karvounis, Measurement of the magnetic field in a miniature plasma focus machine

P2.20: Agnieszka Bukowicka, *New vacuum test stand for neutral gas pressure gauges testing in the constant magnetic field of 1.4 T*

P2.21: Rafael Marques Gomez, Overview of the activities on the ITER fast-ion loss detector

P2.22: Pierre Forestier-colleoni, *Temporal and Spatial Evolution of the Ion Temperature in the WEST tokamak*

P2.23: Luis F. Delgado-Aparicio, *Radiated power density estimates from photon-counting measurements*

P2.24: Craig Maclean, Absolute neutron emission estimate on MAST Upgrade based on activation foil measurements

P2.25: Jorge Santos, FDTD-Based Methodologies in Advanced Microwave Diagnostic System Design

P2.26: Natalja Zorina, Training of Artificial Neural Network for HFEDL Spectral Diagnostics

P2.27: Hang Zhao, Collision correction on collective Thomson scattering spectra and its application in inertial confinement fusion hohlraum plasmas

P2.28: Benoist Grau, Modulations of Thomson Spectrometer parabolas for detecting electromagnetic pulses generated in kilojoule laser-matter interaction experiments

P2.29: Jan Cech, Investigation of time-resolved OES for trace element analysis: ICCD study on volume DBD / APGD plasma sources

P2.30: Alex Reyner Viñolas, *Optimized collimator design and synthetic signals for the ITER Fast Ion Loss Detector*

P2.31: Jakob Brunner, *Neural-network based phase extraction from modulated dispersion interferometers*

P2.32: Courtney Johnson, Implementation of Pfirsch-Schlüter Parallel Flow Effects in X-ray Imaging Crystal Spectrometer Tomographic Inversion Analysis

P2.33: Marina Jimenez-Comez, *Tomographic reconstructions of the MAST-U Fast-Ion Loss Detector using iterative algorithms*

P2.34: Luis Daniel Lopez Rodriguez, *Characterization of a microwave reflectometer for edge density profile measurements at the ICRH antenna on Wendelstein 7-X*

P2.35: Ameer Mohammed, *Commissioning and operation of a real-time Thomson scattering evaluation system for plasma profile determination at the Wendelstein 7-X stellarator*

P2.36: Maylis Dozieres, *General Atomics Excalibur facility for crystal calibration and cold opacity studies*

P2.37: Jibo Zhang, Development of a Novel Optically Pumped Formic Acid Laser for EAST Polarization Interferometer

P2.38: SHOUXIN Wang, Development of a Polarimeter-Interferometer Model Based on Ray Tracing for Predicting Density and Faraday Rotation in Future Fusion Devices

P2.39: Novimir Pablant, *In-situ wavelength calibration of x-ray spectrometers: needed today, critical for tomorrow*

P2.40: Jesús Salas Suárez-Bárcena, *Microwave interferometry and refractometry diagnostics in SMART*

P2.41: Jafar Fathi, *High power Microwave atmospheric air plasma spectroscopy and opportunity to CO2 decomposition*

P2.42: Tomas Gonda, Tungsten Transport Analysis using X-ray Spectroscopy at Wendelstein 7-X

P2.43: Matěj Tomeš, Forward Model of Synchrotron Radiation by Runaway Electrons for Cherab

P2.44: Uwe Wenzel, *Neutral pressure gauges with carbide cathodes for magnetic fusion*

P2.45: Sang Gon Lee, X-ray Imaging Crystal Spectrometer for KSTAR

Poster session 3

Wednesday 9 April, 15:20 – 17:00

P3.1: Yao Wang, Multi-color plasma imaging diagnosis based on metasurface

P3.2: Maryam Huck, *Capillary discharge plasma sources and diagnostics for plasma wakefield acceleration at FLASHForward, DESY*

P3.3: Matteo Hakeem Kushoro, *SiC Neutron Detectors for Harsh Environments: Enhancing the Dynamic Range through Partial Depletion Operation*

P3.4: Soo Hyun Son, *Retention and neutral flux measurement with deposited layer exposed to KSTAR plasma*

P3.5: Ondřej Bareš, Instrumented high fluence neutron irradiation test of Thick Printed Copper coil sensors – first irradiation cycle results analysis

P3.6: Xiaoyi Yang, Introduction to the experimental capabilities of the SPERF-DREX device in *China*

P3.7: Jaroslav Čeřovský, Hard X-ray diagnostics at the COMPASS tomamak and prospects for the COMPASS Upgrade tokamak

P3.8: Lukáš Lobko, Direct detection of runaway electrons by in-vessel scintillation probe at the GOLEM tokamak

P3.9: Marek Tunkl, *Runaway Electron Hard X-ray Diagnostics at the GOLEM Tokamak: A Combined Experimental and Simulation Approach*

P3.10: Haobo Shen, Density Profile Reconstruction with PIDP-KAN model Training based on Polarimeter-Interferometer Measurement on EAST

P3.11: Štěpán Malec, *The Timepix3 semiconductor pixel detector as runaway electron diagnostics at the GOLEM tokamak*

P3.12: Yuan Yao, *Far-forward collective scattering measurement by POINT system on EAST tokamak*

P3.13: Donaldi Mancelli, *Challenges of high repetition rate experiments enabling new paths on high energy density physics*

P3.14: Chen Cheng, Study of the influence of MARFE on the density measurement of interferometers in the EAST device

P3.15: Puchong Kijamnajsuk, *Current Progress on Development of Absolute Extreme Ultraviolet (AXUV) Detector for Thailand Tokamak 1 (TT-1)*

P3.16: Ondřej Ficker, *Neutron diagnostics at the COMPASS tokamak and outlook to COMPASS-Upgrade*

P3.17: Jiří Malinak, *Gaussian Process Tomography for Bolometer Data*

P3.18: Pascale Hennequin, *Density fluctuation frequency spectra as a tool for studying turbulent plasma motion and transport properties in tokamak plasmas*

P3.19: Roland Sabot, First Temperature fluctuation images with WEST ECEI

P3.20: Dmytry Mykytchuk, *High-resolution visible spectroscopy for ion temperature and velocity measurements of the TCV divertor plasmas*

P3.21: Javier Gonzalez-Martin, Final design of the JT-60SA fast-ion loss detector

P3.22: Nopparit Somboonkittichai, *Current Progress on Development of Optical Emission Spectroscopic (OES) Diagnostics for Thailand Tokamak 1 (TT-1)*

P3.23: Mark Cornelissen, *Coherence imaging spectroscopy with a polarization-sensitive sensor to visualize the plasma flows in fusion devices*

P3.24: Martin Imríšek, *Deep Learning Approaches to Reconstructing Thomson Scattering Profiles from Fast Diagnostics at COMPASS*

P3.25: Ivan Ďuran, Antimony Hall sensors with enhanced stability at elevated temperature

P3.26: Manuel Santos, *Spectroscopic characterization of a plasma in an EM cavity*

P3.27: Humberto Trimino Mora, *Uncertainty Evaluation on a Heavy Ion Beam Probe Synthetic Diagnostic for Wendelstein 7-X*

P3.28: Ramon Lopez-Cansino, *Core impurity flow measurements with Coherence Imaging Charge Exchange Recombination Spectroscopy (CICERS) in Wendelstein 7-X*

P3.29: Gergo I. Pokol, Modelling of the optical assembly of the EDICAM camera installed at JT-60SA in the RAYSECT-CHERAB modelling framework

P3.30: Maxim Kramar, 3D Magnetic Field and Plasma Diagnostics for the Solar Corona

P3.31: Jana Brotankova, *Investigation of frequency transfer function of magnetic probes at the PlasmaLab@CTU*

P3.32: Svetlana Vankova, *Temperature estimation of a titanium wire heated by laser-accelerated electrons using radiographic diagnostic*

P3.33: Sara Abbasi, *Training Dataset Optimization for Improved Neural Network Tomography at GOLEM Tokamak*

P3.34: Edward Dewit, *High-Speed Visible Light Emission Profile Measurements of the Plasma Edge on MAST-U: Potential for Real-Time Applications*

P3.35: Jack Flanagan, Ultrafast divertor spectroscopy in the MAST-U super-X divertor

P3.36: Garima Arora, *Study of methane reformation in dielectric barrier discharges using optical emission spectroscopy*

P3.37: Tomas Hoder, *Electrical charge decay on dielectric surface in nitrogen/C4F7N mixtures*

P3.38: Daniel Hachmeister, Revised RF chain for density profile plasma reflectometry in SPARC

P3.39: Pablo G A Cirrone, *A new radiation source based on laser-plasma interaction: status and perspective with the upcoming I-LUCE facility at INFN-LNS*

P3.40: Hamad Ahmed, An Active Ion Spectrometer for Laser-Driven Ion Beams

P3.41: Kuan Lun Pan, Application of Plasma Diagnostics for the Analysis of PFAS Removal Using Liquid-Phase Plasma

P3.42: Patrick Palmeri, *Multiplatform computing of oscillator strengths and transition probabilities in Os V*

P3.43: Giorgio Dilecce, Characteristics of Glow-Discharge LIBS in a rarefied environment