



6<sup>th</sup> European Conference on Plasma Diagnostics  
7-10 April 2025, Prague

# PROGRAM

 **IPP** INSTITUTE OF PLASMA PHYSICS  
OF THE CZECH ACADEMY OF SCIENCES

**SYDOR**  
TECHNOLOGIES

**PHOTEK**  
ENVISAGE THE FUTURE



**HIDEN**  
ANALYTICAL

 **BNC**  
Berkeley Neutronics Corp.

 ASSOCIATION  
LASERS ET  
PLASMAS

**Sunday 6 April**

**Monday 7 April**

**Tuesday 8 April**

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

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

**Wednesday 9 April**

8:50	<b>GENERAL INFORMATION</b>
9:00	<b>GENERAL INFORMATION</b>
9:00	PLENARY (45 min)
9:45	INVITED (30 min)
9:45	INVITED (30 min)
10:15	ORAL (20 min)
10:15	ORAL (20 min)
10:35	Coffee break
10:35	Coffee break
11:10	INVITED (30 min)
11:10	INVITED (30 min)
11:40	ORAL (20 min)
11:40	ORAL (20 min)
12:00	ORAL (20 min)
12:00	ORAL (20 min)
12:20	ORAL (20 min)
12:20	ORAL (20 min)
12:40	Lunch
12:40	Lunch
14:00	INVITED (30 min)
14:00	INVITED (30 min)
14:30	INVITED (30 min)
14:30	INVITED (30 min)
15:00	ORAL (20 min)
15:00	ORAL (20 min)
15:20	Poster
15:20	Poster
	Coffee break
17:00	
17:00	ORAL (20 min)
17:20	ORAL (20 min)
17:20	ORAL (20 min)
17:40	ORAL (20 min)
17:40	ORAL (20 min)
18:00	ORAL (20 min)
18:00	<b>GROUP PICTURE</b>
18:30	<b>GROUP PICTURE</b>
18:30	<b>COMMITTEE REUNION</b>
18:30	<b>COMMITTEE REUNION</b>
19:30	<b>COMMITTEE REUNION</b>

**Thursday 10 April**

8:50	<b>GENERAL INFORMATION</b>
8:50	<b>GENERAL INFORMATION</b>
9:00	<b>GENERAL INFORMATION</b>
9:00	PLENARY (45 min)
9:00	PLENARY (45 min)
9:45	INVITED (30 min)
9:45	INVITED (30 min)
10:15	ORAL (20 min)
10:15	ORAL (20 min)
10:35	Coffee break
10:35	Coffee break
11:10	INVITED (30 min)
11:10	INVITED (30 min)
11:40	Award (30 min)
11:40	Award (30 min)
12:10	ORAL (20 min)
12:10	ORAL (20 min)
12:30	ORAL (20 min)
12:30	ORAL (20 min)
12:50	ORAL (20 min)
12:50	ORAL (20 min)
13:10	ORAL (20 min)
13:10	<b>CONFERENCE CLOSURE</b>
13:30	<b>CONFERENCE CLOSURE</b>
13:30	Lunch
13:30	Lunch
15:00	Lunch
15:00	Lunch
16:00	<b>Visits of Institute of Plasma Physics of the Czech Republic</b>
16:00	<b>Visits of Institute of Plasma Physics of the Czech Republic</b>
18:00	<b>Visits of Institute of Plasma Physics of the Czech Republic</b>

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 D $\alpha$  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 divertor

17:50 O7 – J. Fujera - Advanced analysis of overlapping molecular spectra to determine vibrational distributions of excited electronic states of N<sub>2</sub>, N<sub>2</sub><sup>+</sup> 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. Hoelt - 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 Diagnostics 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, T. Markovic

- 17:00 O22 - P. Turjanica - Innovative Magnetic Field Sensors for Fusion Reactors: Harnessing the Thick Printed Copper Technology  
17:20 O23 - Y. Liu - 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 laboratory)**

Registration at the conference desk.

Address: 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 Ball-pen 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 plasma tokamak*

**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-3 tokamak*
- 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 CO<sub>2</sub> 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 tokamak 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*

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