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×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 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*