## Poster List

**Online Conference** 

ITC31

The 31st International Toki Conference on Plasma and Fusion Research
Expanding academic world emerging from fusion science

November 8-11, 2022

## Poster Session 1 on Nov. 8th 13:00 – 15:00(JST)

 $[P \alpha - \beta F \gamma]$   $\alpha$ : Day,  $\beta$ : Floor number of Remo,  $\gamma$ : Poster number

\*\*Nominee for Best Student Presentation Award

| Day         | Poster number | Presenter         | Affiliation                                         | Title                                                                                                                           |
|-------------|---------------|-------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Nov.<br>8th | P1-1F01       | Wang Hao          | National Institute for Fusion Science               | Simulation of multi-modes in ASDEX-<br>Upgrade plasma                                                                           |
| Nov.<br>8th | P1-1F02       | Nunami Masanori   | National Institute for Fusion Science               | Application of manifold structure in turbulent transport modeling                                                               |
| Nov.<br>8th | P1-1F03       | Kovtun Yurii      | Institute of Plasma<br>Physics of the NSC<br>KIPT   | ICRF plasma production with hydrogen minority heating in Uragan-2M and Large Helical Device                                     |
| Nov.<br>8th | P1-1F04       | canceled          |                                                     |                                                                                                                                 |
| Nov.<br>8th | P1-1F05       | Sakamoto Koki     | Kyoto University                                    | Study of ECH generated Toroidal<br>Torque in HeliotronJ Plasma                                                                  |
| Nov.<br>8th | P1-1F06       | Poolyarat Nopporn | Thailand Institute of Nuclear Technology            | On the Status of Thailand Tokamak-1                                                                                             |
| Nov.<br>8th | P1-1F07       | Yanai Ryoma       | National Institute for Fusion Science               | Study of ECH Beam Broadening<br>Influenced by Density Fluctuations in<br>LHD                                                    |
| Nov.<br>8th | P1-1F08       | Tsunoda Keishi    | Nagoya University                                   | Improvement of the accuracy of eddy current field calculation in the plasma generating region in TOKASTAR-2                     |
| Nov.<br>8th | P1-1F09       | Nasu Tatsuhiro    | The Graduate University for Advanced Studies        | Cross-scale interaction between electron and ion scale turbulence                                                               |
| Nov.<br>8th | P1-1F10       | Wang Jialei       | National Institute for Fusion Science               | Self-consistent Simulations of ICRF-<br>induced Alfvén Eigenmodes in the Large<br>Helical Device                                |
| Nov.<br>8th | P1-1F11       | Sugama Hideo      | National Institute for Fusion Science               | Momentum transport in electromagnetic gyrokinetic turbulence                                                                    |
| Nov.<br>8th | P1-1F12       | Yudai Sugimoto    | Plasma Research<br>Center, University<br>of Tsukuba | First measurement of high-energy ions<br>during excitation of ICRF difference-<br>frequency wave in GAMMA 10/PDX                |
| Nov.<br>8th | P1-1F13       | Zhou Junyao       | QUEST, Kyushu<br>University                         | Investigation Of Electron Bernstein Wave Current Drive In Open Magnetic Flux Surface With High-field-side RF Injection On QUEST |
| Nov.<br>8th | P1-1F14       | Toda Shinichiro   | National Institute for Fusion Science               | Quantitative research of turbulent transport for trapped electron and ion temperature gradient modes in tokamak plasmas         |
| Nov.<br>8th | P1-1F15       | Malik Idouakass   | National Institute for Fusion Science               | Nonlinear Numerical Study of Energetic<br>Particle Transport in ITER Plasmas and<br>Comparison with Current DIII-D Results      |

| Nov.<br>8th | P1-1F16 | Fujimura Tetsuya    | The University of Tokyo                                              | Separation and Clustering of magnetic probe signals by fluctuation using Unsupervised deep learning method                                     |
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| Nov.<br>8th | P1-1F17 | Shinohara Kouji     | The University of Tokyo                                              | Design of probe to investigate energetic electrons in lower hybrid wave plasmas in the TST-2 spherical tokamak                                 |
| Nov.<br>8th | P1-1F18 | Inagaki Shinichiro  | Kyoto Institute of Technology                                        | First experimental monitor of the three-<br>dimensional structure of toroidal<br>plasmas by using multiple soft X-ray<br>imaging technique     |
| Nov.<br>8th | P1-1F19 | Zennifa Fadilla     | Kyushu University                                                    | Development of gyrotron operation system with relational database based on distributed communication processes                                 |
| Nov.<br>8th | P1-1F20 | Gong Mingzheng      | National Institute for Fusion Science                                | A new Correlation-ECE system on LHD                                                                                                            |
| Nov.<br>8th | P1-2F01 | Ikezoe Ryuya        | Research Institute<br>for Applied<br>Mechanics, Kyushu<br>University | Sudden change events of plasma current during electron—cyclotron current start—up on the QUEST spherical tokamak                               |
| Nov.<br>8th | P1-2F02 | Umezaki Daisuke     | Kyushu University                                                    | Observation of knock-on tail formation in deuteron velocity distribution function by ICRF-heated energetic protons in the large helical device |
| Nov.<br>8th | P1-2F03 | Ohno Nobuaki        | University of Hyogo                                                  | Interactive Visualization of MHD simulation data with HMD and VOIR                                                                             |
| Nov.<br>8th | P1-2F04 | Shoji Mamoru        | National Institute for Fusion Science                                | Investigation of the magnetic field configuration for magnetic surface measurements in the CFQS quasi-axisymmetric stellarator                 |
| Nov.<br>8th | P1-2F05 | Okuda Shuhei        | Kyoto University                                                     | Extension of Global Gyrokinetic Code<br>for Tokamak Edge Turbulence<br>Simulation                                                              |
| Nov.<br>8th | P1-2F06 | Saitoh Ayumu        | Yamagata<br>University                                               | Development of High-Performance<br>Solver for Symmetric Linear System in<br>Shielding Current Analysis of HTS Thin<br>Film                     |
| Nov.<br>8th | P1-2F07 | Oguchi Takuya       | University of Toyama                                                 | Measurement of ion energy distribution function of fast plasma flow driven by plasma focus device using retarding field energy analyzer        |
| Nov.<br>8th | P1-2F08 | Adulsiriswad Panith | National Institute for Fusion Science                                | Study of the interaction Between Energetic Particles and Magnetohydrodynamics modes in the JT-60SA inductive scenario                          |
| Nov.<br>8th | P1-2F09 | Li Hanzheng         | The University of Tokyo                                              | Nonlinear Magnetohydrodynamic Effects<br>on Waveform Distortion and Plasma<br>Flow of Off-axis Fishbone Instability in<br>Tokamak Plasma       |
| Nov.<br>8th | P1-2F10 | Goto Takuya         | National Institute for Fusion Science                                | Study on configuration optimization of a fusion power plant with continuous helical coils                                                      |

| Nov.<br>8th | P1-2F11 | Yabumoto Sora      | The Graduate University for Advanced Studies                                            | Detection of Abnormal Magnetic Surfaces in Optimized Configuration Survey                                                                                             |
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| Nov.<br>8th | P1-2F12 | Sakaki Naoto       | Nagoya University                                                                       | Identification of quantum vortex in Gross-Pitaevskii simulation                                                                                                       |
| Nov.<br>8th | P1-2F13 | Kim Doyeon         | Plasma Research<br>Center, University<br>of Tsukuba                                     | Examination of high-density plasma heating on the GAMMA 10/PDX central cell with 3D wave analysis code                                                                |
| Nov.<br>8th | P1-2F14 | Zenitani Seiji     | Kobe University                                                                         | Multiple Boris solvers for particle-in-cell (PIC) simulation                                                                                                          |
| Nov.<br>8th | P1-2F15 | Matsuda Shinzaburo | Meirin Gakusya<br>Student House                                                         | Infection Reproduction EXCEL Model of COVID-19 for Predictive Calculation of Nearby Trend up to the End of Infection                                                  |
| Nov.<br>8th | P1-2F16 | Miura Hideaki      | National Institute for Fusion Science                                                   | Numerical simulations of Hall MHD turbulence with magnetization                                                                                                       |
| Nov.<br>8th | P1-2F17 | Li Haolun          | Kyoto Institute of Technology                                                           | Reactive Molecular Dynamics Study on Intermolecular Structural Changes of Radicalized Polyethylene Chains                                                             |
| Nov.<br>8th | P1-2F18 | Kamitani Atsushi   | Yamagata<br>University                                                                  | Improved Variable-Reduction Method and Its Variant for Solving Asymmetric EFG-Type Saddle-Point Problem                                                               |
| Nov.<br>8th | P1-2F19 | Ishiguro Kento     | Department of Electrical Engineering, Graduate School of Engineering, Nagoya University | Evaluation of the effect of tritium decay on the tolerance of DNA structure by MD simulation                                                                          |
| Nov.<br>8th | P1-2F20 | Lin Zhehao         | Nagaoka University of Technology                                                        | Implosion dynamics of direct-drive fuel pellet with improved structure for reducing nonuniformity of energy deposition by heavy-ion-beam in heavy-ion inertial fusion |
| Nov.<br>8th | P1-3F01 | Ito Shu            | Nagoya University                                                                       | Dependence of Interchange Instability Response to External RMP on Discharge Conditions                                                                                |
| Nov.<br>8th | P1-3F02 | Matsumoto Yutaka   | Hokkaido University                                                                     | Monte-Carlo Analysis of Triton Produced<br>by D-D Fusion Reaction in NB-injected<br>LHD Plasma                                                                        |
| Nov.<br>8th | P1-3F03 | Purohit Shishir    | Institute for Plasma<br>Research                                                        | Investigation of temporal evolution of hard X-ray spectrum from Neon seeded plasma of ADITYA-U Tokamak                                                                |
| Nov.<br>8th | P1-3F04 | Garg Kajal         | Institute for Plasma<br>Research                                                        | Hard X-ray analysis for ADITYA/ADITYA-U limiter plasma                                                                                                                |
| Nov.<br>8th | P1-3F05 | Yatomi Go          | The Graduate University for Advanced Studies                                            | Nonlinear Interaction and Energy Transfer between Drift-Wave Turbulence and Zonal Flow                                                                                |
| Nov.<br>8th | P1-3F06 | Dai Xiaoyue        | The University of Tokyo                                                                 | Characterization and controllability of hydrogen-pellet velocity and fuel deposition by a pneumatic pipe gun                                                          |

| Nov.<br>8th | P1-3F07 | Suzuki Taiju      | Graduate School of<br>Engineering, The<br>University of Tokyo                | Active Control of Reconnection  Downstream Condition for Enhancement of Electron Acceleration in the UTST device                                                                |
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| Nov.<br>8th | P1-3F08 | Anzai Akiyoshi    | Department of<br>Nuclear<br>Engineering, Kyoto<br>University                 | Kinetic Transport Analysis with Finite-<br>Orbit-Width Bounce-averaged Fokker-<br>Planck Simulation Code TASK/FP                                                                |
| Nov.<br>8th | P1-3F09 | Matsuoka Seikichi | National Institute for Fusion Science                                        | Global gyrokinetic simulations of linear ion temperature gradient mode in a stellarator plasma                                                                                  |
| Nov.<br>8th | P1-3F10 | Seto Takumi       | Plasma Reserch<br>Center, University<br>of Tsukuba                           | Development of Steady State High-<br>Density Helicon Plasma Source with 2-<br>turn Flat Loop Antenna for DEMO<br>Divertor Simulation Experiment                                 |
| Nov.<br>8th | P1-3F11 | Nakajima Yutaro   | Kyoto Institute of Technology                                                | Conservation of Particle numbers, Hamiltonians, and Canonical angular momenta in Counter-differential rigid- rotation equilibria of Electrically non- neutral two-fluid plasmas |
| Nov.<br>8th | P1-3F12 | Satake Shinsue    | National Institute for Fusion Science                                        | Analysis on the core potential profile in the impurity-hole plasma in LHD                                                                                                       |
| Nov.<br>8th | P1-3F13 | Shota Mochinaga   | Kyushu University                                                            | Simulation of core plasma transport including impurity in improved confinement mode                                                                                             |
| Nov.<br>8th | P1-3F14 | Nishimura Daiki   | Kyushu University                                                            | Estimation Method of 2D Velocity Field in Turbulent Plasma Using Tomography                                                                                                     |
| Nov.<br>8th | P1-3F15 | Fukano Azusa      | Tokyo Metropolitan<br>College of Industrial<br>Technology                    | Study of plasma with negative hydrogen ions in magnetic field increasing toward a wall                                                                                          |
| Nov.<br>8th | P1-3F16 | Wang Yunfei       | Interdisciplinary Graduate School of Engineering Sciences, Kyushu University | Power balance investigation in long-<br>pulse high-performance discharges in<br>EAST tokamak                                                                                    |
| Nov.<br>8th | P1-3F17 | Matsuura Hiroto   | Osaka Metropolitan<br>University                                             | Application of Two-dimensional Heat<br>Conduction Model to Profile Estimation<br>of Divertor Tile Heat Flux                                                                     |
| Nov.<br>8th | P1-3F18 | Nakamura Hiroaki  | National Institute for Fusion Science                                        | MD analysis on hydrogen behavior in tungsten vacancy                                                                                                                            |
| Nov.<br>8th | P1-3F19 | Matsuzawa Takumi  | University of Toyama                                                         | Numerical study of ion beam evolution by applying pulsed magnetic field to RF plasma                                                                                            |
| Nov.<br>8th | P1-3F20 | Cai Furui         | Kyoto University                                                             | Multi-fold zoning of scrap-off layer in<br>Heliotron J for divertor transport analysis                                                                                          |
| Nov.<br>8th | P1-4F01 | Tanaka Hirohiko   | Nagoya University                                                            | Multivariate analysis of LHD divertor and core plasma distributions                                                                                                             |

| Nov.<br>8th | P1-4F02 | Nojiri Kunpei                | National Institutes<br>for Quantum<br>Science and<br>Technology                       | Assessment of neutral emissivity characteristics of ITER divertor plasmas and prospects for spectroscopic measurements of fuel/impurity influxes and ionization front using Divertor Impurity Monitor |
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| Nov.<br>8th | P1-4F03 | Saito Seiki                  | Yamagata<br>University                                                                | Development of Hydrogen Recycling<br>Model for DEMO Reactor                                                                                                                                           |
| Nov.<br>8th | P1-4F04 | Hamaji Yukinori              | National Institute for Fusion Science                                                 | Development of a heated liquid metal flowing system for PSI research                                                                                                                                  |
| Nov.<br>8th | P1-4F05 | Somboonkittichai<br>Nopparit | Department of Physics, Faculty of Science, Kasetsart University                       | Numerical Study of Heat Transport in<br>Static Liquid Metal Exposed to Plasma<br>with Magnetic Field                                                                                                  |
| Nov.<br>8th | P1-4F06 | Takahashi Satoshi            | Plasma Research<br>Center, University<br>of Tsukuba                                   | Comparison of Spatio-temporal Distribution of Emissions Related to N- MAR Based on High Speed Camera Observation in GAMMA 10/PDX Divertor Simulated Plasmas                                           |
| Nov.<br>8th | P1-4F07 | Kanno Ryutaro                | National Institute for Fusion Science                                                 | Probabilistic Approach to Heavy Impurity Transport in Three-Dimensional Edge Plasma                                                                                                                   |
| Nov.<br>8th | P1-4F08 | Lee Myoung-Jae               | Hanyang University                                                                    | Influence of plasma screening on the Shannon entropy for atomic states in a dense plasma                                                                                                              |
| Nov.<br>8th | P1-4F09 | Matsumura Naoki              | Graduate School of<br>Advanced Science<br>and Engineering,<br>Hiroshima<br>University | Effect of kilo-tesla magnetic field on ignition and burn dynamics in fast ignition laser fusion                                                                                                       |
| Nov.<br>8th | P1-4F10 | Song Dingbao                 | Kyushu university                                                                     | Isonuclear sequence of water window EUV spectra for highly charged bismuth ions                                                                                                                       |
| Nov.<br>8th | P1-4F11 | Simons Joseph<br>John        | The Graduate University for Advanced Studies                                          | Quantitative Analysis of Doppler-free<br>Spectra via the Collisional-Radiative<br>Model                                                                                                               |
| Nov.<br>8th | P1-4F12 | Matsuoka Yoshihiro           | Nagoya University                                                                     | Guiding effect of fast electron by extreme ultrahigh intensity leading laser in fast ignition laser fusion                                                                                            |
| Nov.<br>8th | P1-4F13 | Yagasaki Konan               | Graduate School of<br>Engineering,<br>Nagoya University                               | Increasing the electron density for volumetric recombination in the linear ECR device NUMBER                                                                                                          |
| Nov.<br>8th | P1-4F14 | Priti Priti                  | National Institute for Fusion Science                                                 | Spectral Analysis of Multiply Charged<br>Tungsten ions in NIR Region                                                                                                                                  |
| Nov.<br>8th | P1-4F15 | Kumeda Chihiro               | Graduate School of<br>Advanced Science<br>and Engineering,<br>Hiroshima<br>University | Laser Parameter Dependence of Water-<br>Window X-ray Emitted from Laser-<br>Produced Au Plasma                                                                                                        |

| Nov.<br>8th | P1-4F16 | Takaoka Ryota                    | Department of Electronics, Kyoto Institute of Technology                      | All-in-one probe used for investigating canonical helicity in RELAX plasmas                                                                                   |
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| Nov.<br>8th | P1-4F17 | Jin Hailin                       | The University of Tokyo                                                       | Development of a reflectometry for measuring magnetic shear inside tokamak plasma                                                                             |
| Nov.<br>8th | P1-4F18 | Higuchi Shunya                   | Nagoya university                                                             | Design and development of Laser Thomson Scattering system in the linear ECR plasma experimental device NUMBER                                                 |
| Nov.<br>8th | P1-4F19 | Funaba Hisamichi                 | National Institute for Fusion Science                                         | Real-time measurement of electron temperature and density profiles by Thomson scattering on LHD                                                               |
| Nov.<br>8th | P1-4F20 | Penado Montanez<br>Keith Nealson | Graduate School of<br>Science and<br>Engineering,<br>Doshisha University      | Characterization of a Capacitively-<br>Coupled Atmospheric Pressure Plasma<br>Source for Ion Mobility Spectrometry                                            |
| Nov.<br>8th | P1-5F01 | Shigematsu Naoki                 | Plasma Research<br>Center, University<br>of Tsukuba                           | Development of infrared imaging video<br>bolometer system for radiation power<br>measurement in the upstream of<br>GAMMA 10/PDX divertor simulation<br>plasma |
| Nov.<br>8th | P1-5F02 | Liu Bing                         | National Institute for Fusion Science and Dalian University of Technology     | Footprint analysis of CFQS equilibrium fields by means of field line tracing and transport model                                                              |
| Nov.<br>8th | P1-5F03 | Kanno Hirofumi                   | Graduate School of Engineering, Kobe University                               | Heat quantity measurement for a simulation experiment of divertor thermal load reduction by direct energy conversion                                          |
| Nov.<br>8th | P1-5F04 | Sugiyama Tsukasa                 | The Graduate University for Advanced Studies                                  | Study of asymmetry of heat and particle loads on divertor tiles in LHD                                                                                        |
| Nov.<br>8th | P1-5F05 | Mukai Kiyofumi                   | National Institute for Fusion Science                                         | Relation between toroidally asymmetric behavior of divertor heat load and radiation structure in impurity seeded plasmas on LHD                               |
| Nov.<br>8th | P1-5F06 | Ryosuke Hiraka                   | Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, | Deformation on GaInSn flow surface induced by magnetic field                                                                                                  |
| Nov.<br>8th | P1-5F07 | Yu Hao                           | Tohoku University                                                             | Effect of Fe ion irradiation on the performance of alumina scale formed on FeCrAl ODS ferritic alloys                                                         |
| Nov.<br>8th | P1-5F08 | Yang Haotian                     | The Graduate University for Advanced Studies                                  | Laser processing of advanced materials for fusion sciences                                                                                                    |
| Nov.<br>8th | P1-5F09 | Kobayashi Makoto                 | National Institute for Fusion Science                                         | Evaluation of vacancy accumulation for the prediction of tritium inventory in tungsten                                                                        |

| Nov.<br>8th | P1-5F10 | Ueda Sotaro       | Graduate School of<br>Engineering,<br>Hokkaido<br>University,<br>Sapporo, Japan | Helium Irradiation Effects on Deuterium<br>Permeation Behavior in Tungsten-<br>Coated Ferritic Steel               |
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| Nov.<br>8th | P1-5F11 | Takada Suguru     | National Institute for Fusion Science                                           | Flow-metering Of Cryogenic Helium Gas Using By The Conventional Resistor Thermometers                              |
| Nov.<br>8th | P1-5F12 | Obana Tetsuhiro   | National Institute for Fusion Science                                           | Numerical analysis of hysteresis loss in stacked REBCO tapes for large current-carrying conductors                 |
| Nov.<br>8th | P1-5F13 | Kajitani Hideki   | National Institutes<br>for Quantum<br>Science and<br>Technology                 | Completion of all Winding Packs for ITER Toroidal Field coils in Japan                                             |
| Nov.<br>8th | P1-5F14 | Hasegawa Shin     | National Institutes<br>for Quantum<br>Science and<br>Technology                 | A double check process for CCL positional plates in ITER TF coil integration                                       |
| Nov.<br>8th | P1-5F15 | Shimamoto Tomoki  | The Graduate University for Advanced Studies                                    | Study on effect of segregated copper wires on the cryogenic stability of NbTi/Cu wires                             |
| Nov.<br>8th | P1-5F16 | Ishiyama Shintaro | Waseda University                                                               | Aerodynamic design of Bypass controlled supercritical CO2 gas turbine full scale model for 3GWth FFHR              |
| Nov.<br>8th | P1-5F17 | Nakamura Kazuo    | Research Institute<br>for Applied<br>Mechanics, Kyushu<br>University            | Quaternion Analysis of Transient<br>Phenomena of Motor-Generator                                                   |
| Nov.<br>8th | P1-5F18 | Takeno Hiromasa   | Kobe University                                                                 | Efficiency Dependence on Deceleration Voltage in a Simulation Experiment of Traveling Wave Direct Energy Converter |
| Nov.<br>8th | P1-5F19 | Kunisada Takaaki  | Kobe University                                                                 | Analysis of deterioration of particle separation performance in a cusp-type direct energy converter simulator      |
| Nov.<br>8th | P1-5F20 | Koga Mayuko       | University of Hyogo                                                             | Development of Target Injection System by Using Electromagnetic Coil                                               |

## Poster Session 2 on Nov. 9th 13:00 – 15:00(JST)

 $[P \alpha - \beta F \gamma]$   $\alpha$ : Day,  $\beta$ : Floor number of Remo,  $\gamma$ : Poster number

\*\*Nominee for Best Student Presentation Award

| Day         | Poster number | Presenter                          | Affiliation                                                     | Title                                                                                                                                  |
|-------------|---------------|------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Nov.<br>9th | P2-1F01       | Dey Ritu                           | Institute for Plasma<br>Research                                | Effect of convective transport on cross-<br>field plasma particle and energy fluxes<br>in edge/SOL plasmas of ADITYA-U<br>tokamak      |
| Nov.<br>9th | P2-1F02       | Okada Naonori                      | Tokai University                                                | Characteristics of detachment plasma in ICR heating using the linear divertor simulator TPDsheet-U                                     |
| Nov.<br>9th | P2-1F03       | Matoike Ryota                      | Kyoto Universiry                                                | Counter-Streaming Flow Induced in the Scrape-Off Layer of Heliotron J                                                                  |
| Nov.<br>9th | P2-1F04       | Miyauchi Reina                     | Plasma Research<br>Center, University<br>of Tsukuba             | Observation of Hydrogen Emission Spectra in discharge region of Hot Cathode DC Arc Hydrogen Plasma Source                              |
| Nov.<br>9th | P2-1F05       | Catapang Barabona<br>Allen Vincent | Doshisha University                                             | Measurement of Ion Energy Distributions of Water Vapor Plasma in a DC and 13.56 MHz RF Reactive Magnetron Sputtering Plasma Source     |
| Nov.<br>9th | P2-1F06       | Kitazawa Sin-iti                   | National Institutes<br>for Quantum<br>Science and<br>Technology | Progress of Gamma ray irradiation experiments on ITER diagnostics in JADA                                                              |
| Nov.<br>9th | P2-1F07       | Ogawa Kunihiro                     | National Institute for Fusion Science                           | Large Volume and Fast Response Gamma-ray Diagnostic in the Large Helical Device                                                        |
| Nov.<br>9th | P2-1F08       | Yamada Ichihiro                    | National Institute for Fusion Science                           | Development of a nine-channel polychromator for experimental study of electron velocity distribution by Thomson scattering diagnostics |
| Nov.<br>9th | P2-1F09       | Haba Yasuaki                       | College of Industrial<br>Technology, Nihon<br>University        | Development of a compact negative ion source toward further understanding of velocity distributions for single negative ion beam       |
| Nov.<br>9th | P2-1F10       | Saito Toshiki                      | Institute for<br>Materials Research,<br>Tohoku University       | Microstructural Study of Zr-Added ODS-<br>Cu for DEMO Divertor Heat Sink                                                               |
| Nov.<br>9th | P2-1F11       | Shen Jingjie                       | National Institute for Fusion Science                           | Effects of Ti and Cr Concentrations on<br>Microstructure and Mechanical<br>Properties of High-Purity Vanadium<br>Alloys                |
| Nov.<br>9th | P2-1F12       | Tanaka Teruya                      | National Institute for Fusion Science                           | Applicability of Photoluminescence Measurement with 532 and 635 nm Lasers for Crystallinity Analysis of Er2O3 Electrical Insulator     |

| Nov.<br>9th | P2-1F13 | Muto Ryuhei                 | Tokyo Institute of Technology         | α-Al2O3 layer formation on inner<br>surface of APMT tube for reduction of<br>MHD pressure drop in liquid blanket<br>manifold system              |
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| Nov.<br>9th | P2-1F14 | Hayashi Shunsuke            | Tokai university                      | Deuterium Plasma Exposure Experiments on Tungsten Thin Films Simulating Divertor Redeposited Layers                                              |
| Nov.<br>9th | P2-1F15 | Nurut Marlis<br>Agusutrisno | Kyushu University                     | Dependence of crystal structure and magnetic properties of ZnO:Co films on oxygen and nitrogen gas flow during deposition grown by RF Sputtering |
| Nov.<br>9th | P2-1F16 | Zhang Jiaqi                 | Osaka University                      | Characterization of Solid D-T Fuel for<br>Fusion Reactor Using Refractive Index<br>Distribution Analysis                                         |
| Nov.<br>9th | P2-1F17 | ljima Takahiro              | Tohoku University                     | Feasibility Study on Liquid Divertor Using Molten Salt Free Surface Flow with Turbulent Promoters                                                |
| Nov.<br>9th | P2-1F18 | Akata Naofumi               | Hirosaki University                   | Tritium Concentration in Natural Spring<br>Water Collected at Hirosaki, Japan                                                                    |
| Nov.<br>9th | P2-1F19 | Chikaraishi Hirotaka        | National Institute for Fusion Science | Long-term Operation of Dc Power<br>System for LHD Superconducting Coil                                                                           |
| Nov.<br>9th | P2-1F20 | Ebara Shinji                | Tohoku University                     | Evaluation of Heat Transfer Characteristics of Multi-Elbow Cooling System under One-sided Heating for Fusion Divertor                            |
| Nov.<br>9th | P2-2F01 | Varela Rodriguez<br>Jacobo  | Universidad Carlos<br>III de Madrid   | Modeling of the PbLi flow for different operational regimes of the DCLL blanket module                                                           |
| Nov.<br>9th | P2-2F02 | canceled                    |                                       |                                                                                                                                                  |
| Nov.<br>9th | P2-2F03 | Sato Motoyasu               | Chubu University                      | A concept of ddµFusion - Solid Thorium fission Reactor for Safer and Cleaner Quantum Energy Generator                                            |
| Nov.<br>9th | P2-2F04 | Santharam Kumar<br>Ranjith  | Institute for Plasma<br>Research      | Engineering analysis of the Prototype Center Stack structure for Spherical Tokamak                                                               |
| Nov.<br>9th | P2-2F05 | Tanaka Masahiro             | National Institute for Fusion Science | Chromatographic analysis of<br>atmospheric molecular hydrogen (H2)<br>for understanding environmental<br>molecular tritium (HT)                  |
| Nov.<br>9th | P2-2F06 | Imagawa Shinsaku            | National Institute for Fusion Science | Residual magnetic field by superconducting magnets of the Large Helical Device                                                                   |
| Nov.<br>9th | P2-2F07 | Hirano Naoki                | National Institute for Fusion Science | Elemental Research on a Static Magnetic Refrigeration System for Cooling to Liquid Hydrogen Temperature                                          |
| Nov.<br>9th | P2-2F08 | Nishimura Arata             | National Institute for Fusion Science | Change in Supercritical Surface of Nb3Sn Wire by Neutron Irradiation                                                                             |

| Nov.        |                  |                    |                                       | Development of MgB2 superconducting                                                                  |
|-------------|------------------|--------------------|---------------------------------------|------------------------------------------------------------------------------------------------------|
| 9th         | P2-2F09          | Oguro Hidetoshi    | Tokai University                      | wires with other superconductor additions                                                            |
| Nov.        | P2-2F10          | Kawagoe Akifumi    | Kagoshima<br>University               | Investigation of inter-tape coupling losses in the YBCO stacked cables                               |
| 9th<br>Nov. |                  |                    | National Institute for                | Transport modeling of plasma in a linear                                                             |
| 9th         | P2-2F11          | Kawamura Gakushi   | Fusion Science                        | device with gas flow control                                                                         |
| Nov.        | P2-2F12          | Isobe Yugo         | The University of                     | Data-drive study on occurrence condition of detached plasma in                                       |
| 9th         |                  | 10000 1000         | Tokyo                                 | magnetic confinement                                                                                 |
| Nov.<br>9th | P2-2F13          | Kobayashi Masahiro | National Institute for Fusion Science | Thermal Instability of Toroidal Confinement Plasmas and its Control with Magnetic Perturbation Field |
|             |                  |                    |                                       | Application                                                                                          |
| Nov.<br>9th | P2-2F14          | Oya Makoto         | Kyushu University                     | Predictive calculation of fuel inventory in plasma-facing walls of JA DEMO reactor                   |
| Nov.        | P2-2F15          | lijima Takaaki     | National Institutes for Quantum       | Design of Water-Cooled Glow Discharge                                                                |
| 9th         | 1 2 21 10        | iijiiia Takaaki    | Science and Technology                | Electrode in JT-60SA                                                                                 |
| Nov.        | P2-2F16          | Enomoto Shogo      | Graduate School of Engineering,       | Edge plasma transport modeling in JT-60SA focusing on toroidal field ripple                          |
| 9th         |                  | 3                  | Nagoya University                     | and RMP coil parity difference                                                                       |
|             |                  |                    | Department of<br>Quantum Science      | The effect of the grain size of divertor's                                                           |
| Nov.        | P2-2F17          | Faridafshin        | and Energy<br>Engineering,            | cooling pipe on the capability of high-<br>frequency ultrasonic tests to evaluate                    |
| 9th         |                  | Mohammadjavad      | Graduate School of                    | the quality of the bond between                                                                      |
|             |                  |                    | Engineering,<br>Tohoku University     | divertor's cooling pipe and armor                                                                    |
| Nov.        |                  |                    | University of                         | Analysis of the contribution of magnetic moment conservation to ion energy                           |
| 9th         | P2-2F18          | Takanashi Kosuke   | Tsukuba                               | transport in the GAMMA 10/PDX                                                                        |
| Nov.        |                  |                    |                                       | divergent field region  Mixed Features of Energetic Ion                                              |
| 9th         | P2-3F01          | Nishiura Masaki    | National Institute for Fusion Science | Population from Collective Scattering Spectra in the Large Helical Device                            |
| Nov.        |                  |                    | King Mongkut's<br>University of       | Particle Orbit Analysis toward the                                                                   |
| 9th         | P2-3F02          | Paenthong Worathat | Technology Thonburi                   | Neutral Beam Injection in Thailand<br>Tokamak-1                                                      |
| Nov.        | P2-3F03          | Sanpei Akio        | Kyoto Institute of                    | Role of the Edge Magnetic Field on<br>Rotation of Visible Light Emitted from                         |
| 9th         | FZ <b>-</b> 3FU3 | Janpel Akiu        | Technology                            | RELAX-RFP Plasmas                                                                                    |
| Nov.        | D0 055 :         | 0                  | Kyoto Institute of Technology,        | Confinement times of superimposed                                                                    |
| 9th         | P2-3F04          | Okada Toshikazu    | Department of Electronics             | lithium ion and electron plasmas with regard to the difference in their densities                    |
| Nov.        |                  |                    | National Institute for                | Assessment for DD neutron and secondary Gamma-ray fields in CFQS                                     |
| 9th         | P2-3F05          | Isobe Mitsutaka    | Fusion Science                        | quasi-axisymmetric stellarator toward                                                                |
|             |                  |                    |                                       | deuterium operation                                                                                  |

| Nov.<br>9th | P2-3F06 | Ohtani Hiroaki    | National Institute for Fusion Science                                                    | Analysis of number density of intersection points of energetic tritons and plasma facing wall by virtual-reality system                               |
|-------------|---------|-------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nov.<br>9th | P2-3F07 | Takayama Teruou   | Yamagata<br>University                                                                   | Numerical Investigations on Superconducting Linear Acceleration System by Using Finite Element Method: Influence of Magnet Current on Pellet Velocity |
| Nov.<br>9th | P2-3F08 | Seki Rryosuke     | National Institute for Fusion Science                                                    | Development of TASK3D/WM module with hot-plasma model for analyses of the ICRF wave in a non-axisymmetric torus.                                      |
| Nov.<br>9th | P2-3F09 | Shiroto Takashi   | National Institutes<br>for Quantum<br>Science and<br>Technology                          | Locally divergence-free discontinuous Galerkin method in generalized curvilinear coordinates                                                          |
| Nov.<br>9th | P2-3F10 | Ichiguchi Katsuji | National Institute for Fusion Science                                                    | Numerical analysis of nonlinear<br>transition of pressure driven modes in<br>heliotron plasmas                                                        |
| Nov.<br>9th | P2-3F11 | Wang Yan          | Kobe University                                                                          | In Situ Visualization Inspired By Ant<br>Colony Formation                                                                                             |
| Nov.<br>9th | P2-3F12 | Ito Shoto         | Tokyo Institute of Technology                                                            | Numerical Calculation of Amplification<br>on Nitrogen Balmer-α with Unresolved<br>Satellite Lines                                                     |
| Nov.<br>9th | P2-3F13 | Okamoto Takuma    | Plasma Research<br>Center, University<br>of Tsukuba                                      | Influence of N-MAR on Ion Flux Reduction during N2 and H2 Seeding in Hydrogen plasma                                                                  |
| Nov.<br>9th | P2-3F14 | Kato Daiji        | National Institute for Fusion Science                                                    | Spectroscopic measurements of pellet ablation cloud of lanthanide for laboratory assessment of atomic data relevant to Kilonovae                      |
| Nov.<br>9th | P2-3F15 | Gupta Shivam      | National Institute for Fusion Science                                                    | Spectroscopic Studies of Highly<br>Charged Kr Ions Through Collisional<br>Radiative Model                                                             |
| Nov.<br>9th | P2-3F16 | Murakami Izumi    | National Institute for Fusion Science                                                    | Evaluation of extreme ultraviolet spectra of W22+ - W25+ ions with LHD                                                                                |
| Nov.<br>9th | P2-3F17 | Asai Fumiya       | Nagoya University                                                                        | Development of quasioptical beam tracing code with relaxed scale constraint                                                                           |
| Nov.<br>9th | P2-3F18 | Kad Proxy         | Dr. B.R. Ambedkar<br>National Institute of<br>Technology,<br>Jalandhar, Punjab,<br>India | Dynamics of Hermite-Gaussian Laser<br>beam in plasma and its effect on<br>Teraherz generation                                                         |
| Nov.<br>9th | P2-3F19 | Goka Taiga        | Tokai university                                                                         | Characteristics of extracted current density for the Cs-free negative ion source using TPDsheet-U                                                     |
| Nov.<br>9th | P2-3F20 | Ohshiro Yuken     | The University of Tokyo                                                                  | Measurement of L-shell emission from iron-group elements for high resolution X-ray spectroscopy in future astronomy                                   |

| Nov.<br>9th | P2-4F01 | Usami Shunsuke          | National Institute for Fusion Science                                                   | Investigation of Ion Heating Mechanism during the Plasma Merging in a Spherical Tokamak                                                                         |
|-------------|---------|-------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nov.<br>9th | P2-4F02 | Hasegawa Hiroki         | National Institute for<br>Fusion Science,<br>National Institutes<br>of Natural Sciences | Three-Dimensional Particle-in-Cell<br>Simulations for Study of Filamentary<br>Plasma Structure Formations                                                       |
| Nov.<br>9th | P2-4F03 | Yoshimura Yasuo         | National Institute for Fusion Science                                                   | Comparative Study for Optimum ECH/ECCD System of the Quasi- Axisymmetric Stellarator CFQS                                                                       |
| Nov.<br>9th | P2-4F04 | Mishra Shankar<br>Jyoti | Institute for Plasma<br>Research                                                        | Development of a fast solenoid valve assisted mechanical launcher for cryogenic pellets                                                                         |
| Nov.<br>9th | P2-4F05 | Tahara Kosuke           | Department of Nuclear Engineering, Kyoto University                                     | Influence of the Beam-beam Collisions on the Energetic Particle Distribution in Large Helical Device                                                            |
| Nov.<br>9th | P2-4F06 | Kobayashi Daichi        | Nihon University                                                                        | Visible Light Imaging of Super-<br>Alfvénic/Sonic Collisional Merging<br>Process of Field-Reversed<br>Configurations with Contrast-Medium<br>Mixing Plasmoid    |
| Nov.<br>9th | P2-4F07 | Seki Taichi             | Nihon University                                                                        | Increased Relative Velocity due to Enhanced Magnetic Pressure Gradient for the Collision Experiment of High- Beta Plasmoids                                     |
| Nov.<br>9th | P2-4F08 | Moritaka Toseo          | National Institute for Fusion Science                                                   | Electrostatic field calculation in the edge region of a helical fusion device using the gyrokinetic model                                                       |
| Nov.<br>9th | P2-4F09 | Shimizu Akihiro         | National Institute for Fusion Science                                                   | Recent progress of physics/engineering design and construction of quasi-axisymmetric stellarator CFQS                                                           |
| Nov.<br>9th | P2-4F10 | Xiong Guozhen           | Southwest Jiaotong<br>University                                                        | Effects of discreteness and misalignment of modular coils on the magnetic field and particle confinement in Chinese First Quasi-axisymmetric Stellarator (CFQS) |
| Nov.<br>9th | P2-4F11 | Yamashita Yushiro       | Kyoto University                                                                        | Integrated Simulation Code for<br>Predicting Disruption Process with Non-<br>axisymmetric Eddy Currents                                                         |
| Nov.<br>9th | P2-4F12 | Inoue Takeru            | Kyoto Institute of Technology                                                           | Initial results of tokamak plasmas formed in RELAX                                                                                                              |
| Nov.<br>9th | P2-4F13 | Jajima Yuki             | College of Industrial<br>Technology, Nihon<br>University                                | Estimation of 2D distribution evolution of electrostatic potential fluctuations using deep learning                                                             |
| Nov.<br>9th | P2-4F14 | Fujii Kotaro            | Nagoya University                                                                       | Time delay of zonal flow in functional relations among turbulence, zonal flow, and transport coefficient of gyrokinetic simulations                             |
| Nov.<br>9th | P2-4F15 | Toida Mieko             | National Institute<br>Fusion Science                                                    | Dependence of energetic ion mass on nonlinear development of lower-hybrid wave instabilities                                                                    |

| Nov.<br>9th | P2-4F16 | Fujita Keiji    | National Institute for Fusion Science                                       | How to evaluate neoclassical transport coefficients by a single $\delta f$ simulation                                                                                  |
|-------------|---------|-----------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nov.<br>9th | P2-4F17 | Radžiūtė Laima  | Institute of Theoretical Physics and Astronomy, Vilnius University          | Investigation on ions of Ge-kike iso-<br>electronic sequence                                                                                                           |
| Nov.<br>9th | P2-4F18 | Kojima Tomihiko | NTT Space<br>Environment and<br>Energy<br>Laboratories                      | Numerical Analysis of Plasma Detachment in a Magnetic Thrust Chamber for Laser Fusion Rocket using Fully Particle-in-cell Simulation                                   |
| Nov.<br>9th | P2-4F19 | Kobayashi Taiki | Interdisciplinary Graduate School of Engineering Science, Kyushu University | Investigation of solitary oscillation using tomography in cylindrical plasma                                                                                           |
| Nov.<br>9th | P2-4F20 | Kotani Tsubasa  | Graduate school of Science, Kyoto university                                | Simulation study of harmonic lower hybrid waves due to energetic-ion driven instabilities                                                                              |
| Nov.<br>9th | P2-5F01 | Emoto Masahiko  | National Institute for Fusion Science                                       | Open Data Server for the LHD Experiment Data to Support Fusion Cloud                                                                                                   |
| Nov.<br>9th | P2-5F02 | Feng Chao       | Graduate School of<br>Energy Science,<br>Kyoto University                   | Evaluation of the spatial emission reconstruction based on EUV spectroscopy for asymmetrical magnetic flux surface in Heliotron J                                      |
| Nov.<br>9th | P2-5F03 | Jang Sejung     | Tokyo Institute of Technology                                               | Prediction of Plasma Vertical displacement by Using LSTM Recurrent Neural Network                                                                                      |
| Nov.<br>9th | P2-5F04 | Zhang Pengfei   | Kyoto university                                                            | Properties and characterization of retroreflector array for multi-channel 320GHz interferometer system in Heliotron J                                                  |
| Nov.<br>9th | P2-5F05 | Keren Lin       | Tokyo Institute of Technology                                               | Improvements on Line Intensity Analysis of Neutral Helium by Incorporating the Reabsorption Processes in the Helium Collisional-Radiative Model                        |
| Nov.<br>9th | P2-5F06 | canceled        |                                                                             |                                                                                                                                                                        |
| Nov.<br>9th | P2-5F07 | Furukawa Takeru | Kobe University                                                             | Investigation of ion acceleration in electrodeless plasma thruster using rotating magnetic field acceleration method                                                   |
| Nov.<br>9th | P2-5F08 | Nikaido Fuka    | Osaka university                                                            | Measurement of laser-driven ion with fluorescent nuclear track detectors using machine learning and application for the reconstruction of electric and magnetic fields |
| Nov.<br>9th | P2-5F09 | Hirama Keisuke  | Nihon University                                                            | Development of Tomography Camera<br>System with Doublet Lens Unit for<br>Super-sonic Collisional Merging<br>Formation of FRC                                           |

| Nov.<br>9th | P2-5F10 | Ejiri Akira            | The University of Tokyo                      | Design Study of a Multi-Chord Line<br>Integrated Thomson Scattering System<br>for TST-2 Spherical Tokamak Device                     |
|-------------|---------|------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Nov.<br>9th | P2-5F11 | Akitsu Tetsuya         | University of<br>Yamanashi                   | Study on the Drift-Alfven Turbulence in a Collisional Current-Carrying Finite-β Plasma                                               |
| Nov.<br>9th | P2-5F12 | Nakayama<br>Tomonari   | The Graduate University for Advanced Studies | Simplified transport modeling with turbulence and zonal–flow effects using gradient-based optimization techniques                    |
| Nov.<br>9th | P2-5F13 | Baigetsu Ryosuke       | Department of<br>Nuclear<br>Engineering      | J×B Torque Generation by Perpendicular NBI and ICRF Heating and its Effect on Toroidal Flow in LHD                                   |
| Nov.<br>9th | P2-5F14 | Watanabe Tomo-<br>Hiko | Nagoya University,<br>Kyoto University       | Roles of effective diffusion of ETG turbulence in ITG/TEM instabilities                                                              |
| Nov.<br>9th | P2-5F15 | Kasahara Hiroshi       | National Institute for Fusion Science        | Measurement of minority ion concentration in the ICRF resonance and hybrid layer using fast wave heating in the Large Helical Device |
| Nov.<br>9th | P2-5F16 | Vanthieghem Arno       | Princeton University<br>- NINS               | Electron heating in unmagnetized shock waves                                                                                         |
| Nov.<br>9th | P2-5F17 | Sakai Hikona           | Kyushu University                            | Initial result of interaction between fast ion and turbulence in LHD                                                                 |
| Nov.<br>9th | P2-5F18 | canceled               |                                              |                                                                                                                                      |
| Nov.<br>9th | P2-5F19 | Murakami<br>Sadayoshi  | Kyoto University                             | Effects of magnetic and electrostatic fluctuations on ECH supra-thermal electron behavior and toroidal torques in tokamak plasma     |
| Nov.<br>9th | P2-5F20 | Kawate Tomoko          | National Institute for Fusion Science        | Spectroscopic Diagnostics of Weakly Ionized Plasmas in Anisotropic Fields                                                            |