

# Poster presentation list (Sep. 25, 14:00~17:00)

P1: [Positive Power-Law Scaling of Energy Confinement with Temperature in a High-Beta / Field-Reversed Mirror](#)

Dr. Brendan Sporer (TAE Technologies)

P2: [Stellarator Techniques to Optimize 3D Mirrors for Improved MHD Stability and Reduced Particle Drift](#)

Mr. Djin Patch (UW Madison)

P3: [Plasma and energy losses due to azimuthal fluctuations in the magnetic mirror](#)

Mr. Mikhail Tiushhev (University of Saskatchewan)

P4: [Dynamics of thin plasma cord creation in a magnetic trap for beam-plasma generating a THz radiation flux](#)

Prof. Andrey V. Arzhannikov (Budker Institute of Nuclear Physics)

P5: [Development of a superconducting magnetic system for GDMT](#)

Mr. Daniil Pilipenko (Budker Institute of Nuclear Physics (BINP SB RAS))

P6: [A numerical model of a nonstationary plasma in an axially symmetric open trap MIDAS-1D2V](#)

Dr. Vadim Vadimovich Prikhodko (Budker Institute of Nuclear Physics SB RAS)

P7: [Diagnostics of plasma velocity and electron temperature in the helical open magnetic trap SMOLA](#)

Ms. Anna Aleksandrovna Inzhevatkina (Budker Institute of Nuclear Physics)

P8: [START OF THE INJECTION COMPLEX OF THE EXPERIMENTAL CAT INSTALLATION](#)

Mr. Vyacheslav Valerevich Gamov (Budker Institute of Nuclear Physics (BINP SB RAS))

P9: [Status of the CAT experiment](#)

Mr. Konstantin Sergeevich Kolesnichenko (Budker Institute of Nuclear Physics)

P10: [Drift-kinetic PIC simulations of longitudinal plasma losses in a mirror trap](#)

Mr. Vladimir Vladimirovich Glinskiy (Budker Institute of Nuclear Physics (BINP SB RAS))

P11: [Diamagnetic measurements at the CAT device](#)

Mr. Kirill Fedorovich Zhimulev (Budker Institute of Nuclear Physics SB RAS, Novosibirsk, RF)

P12: [Project of heterodyne detector at 300 GHz frequency and spectral properties of its main elements](#)

Dr. Denis Samtsov (Budker Institute of Nuclear Physics (BINP SB RAS))

P13: [Evidences of energy transfer from trapped ions to plasma oscillations in SMOLA helical mirror trap](#)

Mr. Mikhail Sergeevich Tolkachev (Budker Institute of Nuclear Physics)

P14: [Design of the Cryopumps for the TRT Injector](#)

Dr. Aleksei Bragin (Budker Institute of Nuclear Physics)

P15: [Thomson scattering measurements of plasma parameters evolution in the GOL-NB multiple-mirror trap](#)

Mr. Evgeniy Nikolaevich Skuratov (BINP SB RAS)

P16: [Diamagnetic bubble equilibrium in gas-dynamic multiple-mirror trap](#)

Mr. Mikhail Sergeevich Khristo (Budker INP)

P17: [Status of fusion reaction diagnostics at the GDT facility](#)

Mr. Egor Pinzhenin (BINP)

P18: [Model of plasma dynamics in a multiple-mirror trap with long-scale corrugation at an arbitrary Mach number](#)

Mr. Evgenii Nikolaevich Sidorov (BINP SB RAS)

P19: [Analysis of the influence of thermal loads on the size and shape of the GDML limiter](#)

Mr. Vladimir Andreevich Popov (BINP SB RAS)

P20: [Centrifugal and Electron temperature effects in Vortex Confinement regime](#)

Mr. Sergey Konstantinov (Budker Institute of Nuclear Physics SB RAS)

P21: [Mathematical modeling of plasma transport in a helical magnetic field](#)

Ms. Irina Oksogoeva (RUDN University)

P22: [Numerical modeling of dense plasma beam injection into a mirror machine along the axis](#)

Dr. Ivan Sergeevich Chernoshtanov (Institute of Computational Mathematics and Mathematical Geophysics SB RAS)

P23: [Fully kinetic modeling of plasma confinement in a mirror trap using a semi-implicit electromagnetic 3D PIC code](#)

Dr. Evgenii Andreevich Berendeev (Novosibirsk State University)

P24: [Kinetic theory of a transition layer in a diamagnetic bubble at a finite electron temperature](#)

Mr. Vladislav Kurshakov (Novosibirsk State University, Budker Institute of Nuclear Physics)

P25: [Laser-Induced Fluorescence Diagnosis of General Ion Motion and Velocity Distribution in a Magnetic X-point Configuration](#)

Mr. Alvin Amry Sugianto (Korea Advanced Institute of Science and Technology (KAIST))

P26: [Development of a SiPM-Based Filterscope System in the KAIMIR Device](#)

Mr. Dongha Kim (KAIST (Korea Advanced Institute of Science and Technology))

P27: [Experimental Investigation of Neutral Effects on a Tokamak Boundary Plasma Simulator Using the KAIMIR Device](#)

Mr. Dong geun Oh (Korea Advanced Institute of Science and Technology)

P28: [Developments of two interferometer systems for plasma density measurements in KAIMIR](#)

Mr. Yeono Jung (Korea Advanced Institute of Science and Technology (KAIST))

P29: [Design and Commissioning of a New Field-Reversed Configuration Device at KFE](#)

Mr. Soo Ouk Jang (Korea Institute of Fusion Energy)

P30: [A V-band mm-wave interferometer for the FRC device](#)

Mr. KYU-DONG LEE (Korea Institute of Fusion Energy)

P31: [Development of a THz interferometer system for Korea Superconducting Tokamak Advanced Research](#)

Dr. DongJae Lee (KFE)

P32: [Design of an electrostatic analyzer for detection of alpha particles produced in p-11B reaction experiments](#)

Dr. Masanori Mizuguchi (LINEA innovations, Inc.)

P33: [Development of Compact Toroid Injection System for the GAMMA 10/PDX Device](#)  
Dr. Taichi Seki (LINEA Innovations, Inc.)

P34: [Impact of plasma flow on ion temperature measurement using retarding field analyzers](#)  
Mr. Shigetaka Kagaya (Tohoku univ.)

P35: [Inferring electron density based on hydrogen Balmer line ratio under radiation trapping condition](#)  
Dr. Hiroyuki Takahashi (Tohoku University)

P36: [He I line intensity ratio method considering spatially non-uniform radiation trapping effect](#)  
Mr. Shogo Otsuka (Tohoku University)

P37: [Particle balance analysis of hydrogen molecular activated recombining plasma in DT-ALPHA](#)  
Mr. Keigo Yoshimura (Department of Quantum Science and Energy Engineering, Tohoku University)

P38: [Three-dimensional propagation of linear low-frequency waves in FRC equilibrium](#)  
Mr. ZHANG SIYU (Gunma University)

P39: [Numerical simulation of pyroelectric fusion with introduction of open magnetic field](#)  
Mr. Shun Inoue (GunmaUniversity)

P40: [Numerical study of neutral beam injection during the startup phase of a D-3He/FRC Fusion Reactor](#)  
Mr. Kanato Yuri (Gunma University)

P41: [Numerical analysis of the capture of beam ions accelerated by cyclotron auto-resonance acceleration \(CARA\) in field-reversed configuration plasmas](#)  
Mr. Toru Takahashi (Graduate School of Science and Technology, Gunma University)

P42: [Investigation of kinetic equilibrium of field-reversed configuration plasmas using a hybrid simulation model](#)  
Mr. Shuhei Saito (Graduate School of Science and Technology, Gunma University)

P43: [Divertor plasma response to transient heat pulses under low neutral pressure conditions in GAMMA10/PDX](#)  
Dr. Yuki Hayashi (The University of Tokyo)

P44: [Resolving Fast Electron Flux with a Target Probe System on TST-2](#)  
Mr. Yiming Tian (The University of Tokyo)

P45: [Development of High-Speed LTS Diagnostic system for Nonequilibrium Merging FRC Plasmas](#)  
Dr. Ryunosuke Kikuchi (Nihon University)

P46: [Technical Evaluation of Fusion Reactors for Lunar Installation](#)  
Ms. Himeka Suzuki (Nihon University)

P47: [Dependence of FRC Formation on Mirror Magnetic Field Strength Using Full 2D Equilibrium Analysis](#)  
Ms. Satsuki Ishiwata (Nihon University)

P48: [Simulation of Linear Detached Hydrogen Plasmas Using a Multi-Temperature Fluid Model](#)  
Dr. Hiroki Natsume (Tokai University)

P49: [Investigation of Leg Length Dependence in Simulated Divertor Plasmas Using TPDsheet-ICR](#)  
Dr. Naonori Okada (Tokai University)

P50: [Verification of plasma instability suppression using a thermionic emission electrode in a linear plasma device](#)  
Mr. Shoma Hirata (Nagoya University)

P51: [Effects of metastable atom transport in detached helium plasma elucidated by the integrated transport code DISCOVER](#)  
Mr. Ryoji Mano (Graduate School of Engineering, Nagoya University)

P52: [A new power generation method in a simple mirror plasma](#)  
Prof. Hiromasa Takeno (Kobe University)

P53: [Influence on plasma flow using rotating magnetic field plasma acceleration in a miniature RF plasma thruster](#)  
Dr. Takeru Furukawa (Kobe University)

P54: [A basic study of grid-less electrode application to traveling wave direct energy converter](#)  
Mr. Kimiyasu Kannaka (Kobe University)

P55: [Plasma fluid simulation using a pseudo-potential for evaluating RF plugging effects](#)  
Ms. Wooran FUMIKAWA (Kyushu University)

P56: [The electrode biasing system in Pilot GAMMA PDX-SC](#)  
Dr. Tomoharu Numakura (University of Tsukuba)

P57: [Development of the Electron Cyclotron Heating System for High-Density Plasmas in the Pilot GAMMA PDX-SC](#)  
Dr. Ryutaro Minami (Plasma Research Center, University of Tsukuba)

P58: [First Installation of ICRF Heating System in Pilot GAMMA PDX-SC](#)  
Dr. Mafumi Hirata (Plasma Research Center, University of Tsukuba)

P59: [Effect of infrared heating for improving the heating on LaB6 hot cathode surface temperature and plasma profile in the DC arc plasma source of Pilot GAMMA PDX-SC](#)  
Mr. Taisei Matsuo (Plasma Research Center, University of Tsukuba)

P60: [Modeling of kinetic effects on ion parallel conductive heat flux in SOL plasma using particle simulation](#)  
Mr. Hayase Maruyama (Plasma Research Center, University of Tsukuba)

P61: [Initial Measurements of a Diamagnetic Loop in Pilot GAMMA PDX-SC](#)  
Mr. Daisuke Horio (Plasma Research Center)

P62: [High-Density and Large-Diameter Hydrogen Plasma Generation by Hybrid Discharge Method](#)  
Mr. Yuta Kinashi (Plasma Research Center, University of Tsukuba)

P63: [Initial Application of Plasma Simulation in the End-cell of GAMMA 10/PDX Using the EMC3-EIRENE Code](#)  
Mr. Satoshi TAKAHASHI (Plasma Research Center, University of Tsukuba)

P64: [Separation of He-W Co-deposited Layers on NaCl Substrate with Evaluation of Structural Properties and Deuterium Retention](#)  
Mr. Aoi Kataniwa (Plasma Research Center, University of Tsukuba)

P65: [Effect of Magnetic Field in the Antenna Region on RF Plasma Generation in the Superconducting Mirror Device Pilot GAMMA PDX-SC](#)

Mr. Takumi Seto (Plasma Research Center, University of Tsukuba)

P66: [The relationship between D-Ar plasma exposure conditions, W-D co-deposited structural properties, and D absorption properties](#)

Mr. Takuto Okugi (Plasma Research Center, University of Tsukuba)

P67: [Preparation of deuterium-tungsten co-deposited layer suitable for STEM-EELS analysis](#)

Mr. Kota Saito (Plasma Research Center, University of Tsukuba)

P68: [Initial Results of Double Probe Measurements in the Open Magnetic Field End Chamber of the Pilot GAMMA PDX-SC](#)

Mr. Asuma Ogura (Plasma Research Center, University of Tsukuba)

P69: [Initial results of near infrared emission spectrum measurement in the GAMMA 10/PDX divertor simulation plasmas](#)

Mr. Kento Matsunaga (University of Tsukuba)

P70: [Effect of DC+RF combined biasing on surface structural changes of tungsten induced by pure helium plasma irradiation](#)

Mr. Yukiya Numata (Plasma Research Center, University of Tsukuba)

P71: [Estimation of Ion Temperature from Ion Particle Flux into the Probe Electrode Using Plasma Particle Simulations](#)

Mr. Daiki Yokoyama (Plasma Research Center, University of Tsukuba)

P72: [Investigation of cross-field transport in detached plasma using a multi-pin probe in GAMMA 10/PDX divertor simulated plasma](#)

Mr. Hiroki Senboku (Plasma Research Center, University of Tsukuba)

P73: [Time-dependent fluid simulation of the dynamic response of detached plasma to transient heat and particle flux at GAMMA 10/PDX](#)

Mr. Akihiro Kunii (Plasma Research Center, University of Tsukuba)

P74: [Effect of End Plate Potential on Hot Cathode Arc Discharge Hydrogen Plasma in Pilot GAMMA PDX-SC](#)

Mr. Reina Miyauchi (Plasma Research Center, University of Tsukuba)

P75: [Investigation of kHz range fluctuations in Balmer emissions during detached plasma operation in GAMMA 10/PDX](#)

Mr. Chiharu Masuya (Plasma Research Center, University of Tsukuba)

P76: [Effective Excitation of an Alfvén Slow Wave as the Difference-Frequency Wave between Two Fast Waves in the GAMMA 10/PDX Central Cell](#)

Mr. Hiro Bhattarai (Plasma Research Center, University of Tsukuba)

P77: [Validation of a method for evaluating electron temperature using hydrogen molecular emissions in the GAMMA 10/PDX and PGX-SC divertor simulated plasmas](#)

Mr. Riku KOMAMI (University of Tsukuba)

P78: [Development of B-dot Probe and Wave Characteristic Evaluation of RF-Plasma in Pilot GAMMA PDX-SC](#)

Ms. Mizuki Ono (University of Tsukuba (Plasma Research Center))

P79: [Applying Machine Learning to Spectral Data of the Central Cell of the Tandem Mirror GAMMA10/PDX](#)

Ms. Yui Nagano (Plasma Research Center, University of Tsukuba)

P80: [Effect of controlling the termination plate potential on mode transitions in RF plasmas of APSEDAS](#)

Ms. Hana Kida (Plasma Research Center, University of Tsukuba)

P81: [I-V Characteristics of Ion Sensitive Probes during plasma discharge with ECH and ICRF heating in Pilot GAMMA PDX-SC](#)

Ms. Haruka Ichikawa (University of Tsukuba)

P82: [Deuterium retention in He-W co-deposited layers: analysis of temperature effects](#)

Ms. Maria Sakamoto (Plasma Research Center, University of Tsukuba)