

PRESENTATION SCHEDULE _ POSTER PRESENTATION

iFPC 2024

3RD INTERNATIONAL FUSION AND PLASMA CONFERENCE
JUNE 24-28, 2024 | SEOUL OLYMPIC PARKTEL, SEOUL, KOREA

Date	June 26 (Wed.), 2024	Presentation Time	PS1 - 13:30~14:50 PS2 - 16:40~18:00	Place	Olympia Hall (1F)
Presentation Code	Title			Authors	
PS1-001 (01_1080)	Assessing Heat Flux on KSTAR PFCs Due to Fast Ion Loss and Shine-Through using the NuBDeC Simulation Framework with 3D Magnetic Field Perturbation Capability			Taeuk Moon ¹ , Tongnyeol Rhee ² , Jae-Min Kwon ² , and Eisung Yoon ¹ <i>(1UNIST, Korea, 2KFE, Korea)</i>	
PS1-002 (05_1029)	Injection Magnet System for Korea-4GSR Facility			Garam Hahn, Dong Eon Kim, and YongGyu Jung <i>(PAL, Korea)</i>	
PS1-003 (01_1077)	Neutral Beam Source Dependence on the Plasma Performance at Tungsten and Graphite Wall Conditions in KSTAR			Jong-Gu Kwak and M.H. Woo <i>(KFE, Korea)</i>	
PS1-004 (01_1075)	Gyrokinetic Simulation of Multi-scale Interactions in KSTAR L-mode Disruptive Plasmas			Min Ki Jung ¹ , Jayhyun Kim ² , Jae-Min Kwon ² , Minjun Choi ² , SangKyeun Kim ³ , Yong-Su Na ¹ , and Gyungjin Choi ¹ <i>(1Seoul Nat'l Univ., Korea, 2KFE, Korea, 3PPPL, USA)</i>	
PS1-005 (02_1069)	Experiments on Efficiency Improvement and Long-pulse Operation in the KSTAR NBI System			Jinhyun Jeong, Seulchan Hong, Jae Young Jang, Min Park, Byoungseung Kim, Wook Cho, Jongsu Kim, Hyun-taek Park, Young-Ju Lee, Jaewook Kim, Daejun Choi and Jong Gu Kwak <i>(KFE, Korea)</i>	
PS1-006 (01_1057)	Further Gyrokinetic Analysis for Fast Ion Effects on Turbulence in High Fast Ion Fraction ITB Mode Discharge			D. Kim ¹ , S.J. Park ² , G.J. Choi ² , Y.W. Cho ³ , J. Kang ⁴ , H. Han ⁴ , J. Candy ⁵ , E.A. Belli ⁵ , Y.-S. Na ² , T.S. Hahn ² , and C. Sung ¹ <i>(1KAIST, Korea, 2Seoul Nat'l Univ., Korea, 3Nanyang Technological Univ., Singapore, 4KFE, Korea, 5GA, USA)</i>	
PS1-007 (01_1056)	Development and Validation of Conductor Models for Magnetic Control Simulator in KSTAR			Sang-hee Hahn ¹ , Y.H. Lee ¹ , G.W. Shin ¹ , J.G. Bak ¹ , J.W. Lee ¹ , J. Barr ² , N.W. Eidietis ² , H. Anand ² , W. Choi ² , A. Welander ² , and W. Wehner ² <i>(1KFE, Korea, 2General Atomics, USA)</i>	
PS1-008 (01_1054)	Analytic Representation of Fusion Yield and Its Application			Jun-Sang Hwang and Jong-Kyu Park <i>(Seoul Nat'l Univ., Korea)</i>	
PS1-009 (01_1044)	Quantitative Analysis of Zonal Flow Contribution in Trapped Electron Modes through Gyrokinetic Simulations			Jiheon Song ¹ , Jungpyo Lee ¹ , Emily Belli ² and Jeff Candy ² <i>(1Hanyang Univ., Korea, 2General Atomics, USA)</i>	
PS1-010 (01_1030)	Investigation of Edge Fluctuation Characteristics of the KSTAR FIRE Mode			Chweeho Heo ¹ , Sang-Jin Park ¹ , Gyungjin Choi ¹ , Eun-jin Kim ^{1,3} , YoungMu Jeon ² , Jaewook Kim ² , Minjun Choi ² , Hyunsun Han ² , and Yong-Su Na ¹ <i>(1Seoul Nat'l Univ., Korea, 2KFE, Korea, 3Coventry Univ., UK)</i>	

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Presentation Code	Title			Authors	
PS1-011 (01_1021)	The Influence of Negative Triangularity in MHD Equilibrium on Turbulence			Junhyuk Song and Jungpyo Lee <i>(Hanyang Univ., Korea)</i>	
PS1-012 (01_1020)	Effect of Aspect Ratio Decrease through Major Radius on Core Turbulent Transport and Edge Pedestal Stability in Tokamaks			Jin-Yong Kim and Hyunsun Han <i>(KFE, Korea)</i>	
PS1-013 (01_1019)	Identifying Heating Efficiency of KSTAR ECH System with GENRAY and CQL3D Simulations			Jiho Park ¹ , Chanho Moon ¹ , Mi Joung ² , Sonjong Wang ² , Robert Harvey ³ , and Jungpyo Lee ¹ <i>(1Hanyang Univ., Korea, 2KFE, Korea, 3CompX, USA)</i>	
PS1-014 (01_1018)	Advancing Virtual Tokamak Environment through Augmented Data Techniques			Hyungkeun Nam and Jaemin Seo <i>(Chung-Ang Univ., Korea)</i>	
PS1-015 (01_1017)	Finite-orbit Width Effects on Energetic Particle-driven Geodesic Acoustic Modes			Young-Hoon Lee and Jungpyo Lee <i>(Hanyang Univ., Korea)</i>	
PS1-016 (01_1004)	Study of Edge-localized Modes (ELMs) on the Spherical Tokamak Globus-M2			A. Yashin ¹ , M. Buts ¹ , V. Gusev ² , E. Kiselev ² , N. Khromov ² , G. Kurskiev ² , V. Minaev ² , Y. Petrov ² , A. Ponomarenko ¹ , N. Sakharov ² , P. Shchegolev ² , V. Solokha ² , V. Timokhin ¹ , A. Tokarev ¹ , and N. Zhiltsov ² <i>(1Peter the Great St. Petersburg Polytechnic Univ., Russia, 2Ioffe Inst., Russia)</i>	
PS1-017 (01_1003)	Correlation Analysis of Plasma Turbulence in the Globus-M2 Tokamak using the Doppler Backscattering Diagnostic			A. Ponomarenko ¹ , A. Yashin ¹ , V. Gusev ² , E. Kiselev ² , G. Kurskiev ² , V. Minaev ² , Y. Petrov ² , N. Sakharov ² , P. Shchegolev ² , and N. Zhiltsov ² <i>(1Peter the Great St. Petersburg Polytechnic Univ., Russia, 2Ioffe Inst., Russia)</i>	
PS1-018 (02_1064)	Overview of Design and Development for ITER VUV Spectrometers with Prototypes			C. R. Seon ¹ , Y. H. An ¹ , B. S. Kim ¹ , S. M. Jung ² , H. K. Lee ² , J. Lee ² , J. H. Hong ³ , J. Jang ¹ , I. W. Song ³ , H. W. Shin ³ , J. H. Yoon ³ , Y. S. Han ³ , W. Choe ³ , Y. K. Kim ⁴ , M. G. Won ¹ , M. S. Cheon ¹ , H. G. Lee ¹ , P. Bernsacolle ⁵ , and R. Barnsley ⁶ <i>(1KFE, Korea, 2SJM Co. Ltd., Korea, 3KAIST, Korea, 4Ajou Univ., Korea, 5Bertin Technologies, France, 6ITER Organization, France)</i>	
PS1-019 (02_1063)	The Operation Results of the Integrated Control System from 2023 to 2024 KSTAR Campaigns			Jaesic Hong, Seungju Lee, Myungkyu Kim, Giil Kwon, Taegu Lee, Sangwon Yun, Yeonjung Kim, and Kaprai Park <i>(KFE, Korea)</i>	
PS1-020 (02_1058)	Fast Gas Injection System Design in VEST			Chan-Hwi Jeon ¹ , Won-Ik Jeong ¹ , and Yong-Seok Hwang ¹ <i>(Seoul Nat'l Univ., Korea)</i>	

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PS1-021 (02_1054)	Progress of the Manufacturing of Diagnostic First Wall for ITER Equatorial Port Plug			Jinho Bae, Kyoungso Nam, and MunSeong Cheon <i>(KFE, Korea)</i>	
PS1-022 (02_1043)	Feasibility Verification on Wall Thickness Reduction of the ITER Blanket Shield Block			Ji-Young Jeong ¹ , Jun-Sung Jang ¹ , Sa-Woong Kim ¹ , Ji Hoon Kim ² , and Min Su Kim ² <i>(1KFE, Korea, 2Energy & Machinery Korea Co., LTD, Korea)</i>	
PS1-023 (02_1042)	Maintenance of the NBI Beam Lines for the KSTAR Plasma Experimental Campaign 2024			Young Ju Lee, Hyun-taek Park, Joungsu Kim, Wook Cho, Dae Jun Choi, Min Park, Jaewook Kim, Seulchan Hong, Jae Young Jang, Jinhyun Jeong, and Jong Gu Kwak <i>(KFE, Korea)</i>	
PS1-024 (02_1041)	RAMI Analysis in Final Design of Upper Port #18 for ITER Diagnostics			Jihyun Choi, Jaemin Kim, and Munseong Cheon <i>(KFE, Korea)</i>	
PS1-025 (02_1040)	Development Progress of KSTAR Timing System			Yeon-Jeong Kim, Seung-Ju Lee, Taegu Lee, and Jaesic-Hong <i>(KFE, Korea)</i>	
PS1-026 (02_1023)	Investigation of Additional Loss in AC Losses during Low Ramp Rate Current on KSTAR PF Coils			Mu-yong Kim, Hyunjung Lee, Giil Kown, Seokho Nam, Hyun Wook Kim, Yong Chu, Kwang Pyo Kim, and Kaprai Park <i>(KFE, Korea)</i>	
PS1-027 (02_1022)	Improvements of Database System and Analysis Suite in VEST			Sun-Jae Lee ¹ , Hong-Sik Yun ¹ , Laurent Terzolo ² , Jung-Hwa Kim ¹ , and Yong-Seok Hwang ¹ <i>(1Seoul Nat'l Univ., Korea, 2KFE, Korea)</i>	
PS1-028 (02_1021)	Antenna Development and Installation Preparation for Lower Hybrid Fast Wave Experiments on KSTAR			JongGab Jo ¹ , S. H. Kim ¹ , H. H. Wi ² , and S. J. Wang ² <i>(1KAERI, Korea, 2KFE, Korea)</i>	
PS1-029 (02_1012)	Evaluation of Diffusion Bonding Processed W-V-RAFM Steel PFC Mockups with Embedded Cooling Structure			Hyoung Chan Kim ¹ , Sungjin Kwon ¹ , Eunnam Bang ¹ , Heekyung Choi ¹ , and Chang-Hoon Lee ² <i>(1KFE, Korea, 2KIMS, Korea)</i>	
PS1-030 (02_1003)	The FPGA Programming for Abnormal Ip Detection and Protection in KSTAR FIS			Myungkyu Kim, Seung-Ju Lee, and Jaesic Hong <i>(KFE, Korea)</i>	

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Presentation Code	Title			Authors	
PS1-031 (02_1001)	Development and Preliminary Results of 30 MeV Cyclotron-based Nneutron Source at KAERI			Dong Won Lee ¹ , Bongki Jung ^{1,2} , Kihyun Lee ¹ , and Pilsoo Lee Lee <i>(1KAERI, Korea, 2QBeam Solution, Korea)</i>	
PS1-032 (03_1068)	Anisotropic Electron Velocity Distribution Functions in E×B Penning Source			Jung-min Park, Chang-Su Kim, Ga-young Sim, and June Young Kim <i>(Korea Univ., Korea)</i>	
PS1-033 (03_1066)	Real-time Toroidal Velocity (rtVphi) Diagnostic on KSTAR			Jongsoo Yoo ¹ , Keith Erikson ¹ , Steve Sabbagh ² , Wonha Ko ³ , and Young-Seok Park ³ <i>(1PPPL, USA, 2Columbia Univ., USA, 3KFE, Korea)</i>	
PS1-034 (03_1064)	Classification of Plasma Dynamics in Capacitively Coupled RF Plasmas using Principal Component Analysis			Cheol Woong Kim and Hae June Lee <i>(Pusan Nat'l Univ., Korea)</i>	
PS1-035 (03_1059)	The Effect of Surface Charge Density by an Embedded Electrode in the Focus Ring on Ion Incident Angle in a Capacitively Coupled Ar Plasma			Seoi Choi and Hae June Lee <i>(Pusan Nat'l Univ., Korea)</i>	
PS1-036 (03_1049)	Reliability of ECE Calibration Based on Daily Wall Reference Discharge in KSTAR			Kyu-Dong Lee, Yong-Un Nam, Jongha Lee, and Kwang-Pyo Kim <i>(KFE, Korea)</i>	
PS1-038 (03_1044)	Measurement of Neutral Pressure Near KSTAR Tungsten Mono-Block Divertor Region Using Feedforward-controlled Crystal Cathode Pressure Gauges			Hoiyun Jeong ¹ , Hyungho Lee ² , Myungkyu Kim ² , Uwe Wenzel ³ , and Young-chul Ghim ¹ <i>(1KAIST, Korea, 2KFE, Korea, 3Max Planck Inst. for Plasma Physics, Germany)</i>	
PS1-039 (03_1037)	Solvated Electrons and Hydroxyl Radicals at the Plasma-Liquid Interface			Seungjun Lee and Gunsu Yun <i>(POSTECH, Korea)</i>	
PS1-040 (03_1036)	Design and Installation of Visible Diagnostics for W Divertor for KSTAR			Dongcheol Seo and Juhyeok Jang <i>(KFE, Korea)</i>	

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PS1-041 (03_1030)	KSTAR MDSplus Servers Configuration Changed with New Storage			Taegu Lee and Jaesic Hong <i>(KFE, Korea)</i>	
PS1-042 (03_1029)	Development of Multichannel Two-filter Soft X-ray System to Study Two-dimensional Electron Temperature Evolution in VEST			M. W. Lee ¹ , S. Lim ² , W. Jeong ² , J. Han ¹ , J. H. Kim ² , Y. S. Hwang ² , and C. Sung ¹ <i>(1KAIST, Korea, 2Seoul Nat'l Univ., Korea)</i>	
PS1-043 (03_1018)	Evaluation of Machine Learning Estimation Methods for Rreal-time Thomson Scattering analysis			Moe Akimitsu ¹ , Yoshiaki Ohtani ¹ , Hisamich Funaba ² , Ichihiro Yamada ² , Hiroshi Tojo ¹ , Tomohide Nakano ¹ , and Maiko Yoshida ¹ <i>(1QST, Japan, 2NIFS, Japan)</i>	
PS1-044 (03_1017)	Study of Hot Ion Plasmoid at the GDT Facility by Charge Exchange Atoms and Fusion Product Diagnostics			Egor Pinzhenin and Vladimir Maximov <i>(BINP, Russia)</i>	
PS1-045 (03_1014)	Development of Gaussian Process Tomography Method for a Spectroscopic Diagnostic System with a Limited Field of View			Yoon Seong Han ¹ , Junhyeok Yoon ¹ , Joohwan Hong ² , Changrae Seon ² , and Wonho Choe ¹ <i>(1KAIST, Korea, 2KFE, Korea)</i>	
PS1-046 (03_1013)	Development of Nine- and Twelve-Channel Polychromators for Experimental Study of Electron Velocity Distribution by Thomson Scattering Diagnostics			Ichihiro Yamada ^{1,2} , Hisamichi Funaba ¹ , Tokihiko Tokuzawa ^{1,2} , Jong-ha Lee ^{3,4} , Ha Jin Kim ³ , Geunhyeong Park ^{3,4} , Yuan Huang ³ , and Chunhua Liu ⁵ <i>(1NIFS, Japan, 2SOKENDAI, Japan, 3KFE, Korea, 4UST, Korea, 5SWIP, China)</i>	
PS1-047 (03_1008)	A Study on the Correlation between OES Wavelengths and VI Probe Harmonics Data Measured in N2 Plasma in ICP Reactor			Yonghyun Kim, Jong-Sik Kim, and Dae-Chul Kim <i>(KFE, Korea)</i>	
PS1-048 (03_1007)	Feasibility Study on the Microwave Tomography for the Measurement of the Spatial Profiles of the Plasma			Seongmin Choi and Y.-c. Ghim <i>(KAIST, Korea)</i>	
PS1-049 (03_1006)	Nonlinear Integrating Drift Corrected Diamagnetic Fluxes from Diamagnetic Loop Measurement during Long Pulsed Plasmas in the KSTAR Tokamak			Jun-Gyo Bak, Heung-Su Kim, Hyun-Seok Kim, and the KSTAR team <i>(KFE, Korea)</i>	
PS1-050 (03_1005)	Simulation and Analysis of Optical efficiency for Tangential Thomson Signal Collection Structure in KSTAR			Ha jin Kim ¹ , Geunhyeong Park ^{1,2} , and Jong-ha Lee ^{1,2} <i>(1KFE, Korea, 2UST-KFE School, Korea)</i>	

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PS1-051 (04_1071)	Controlled Growth of Thermally Stable and Conducting Ge Core/ BCN Shell Nanowire			Jun-Hui Choi ¹ , Ji-Yun Moon ^{1,2} , and Jae-Hyun Lee ^{1,3} <i>(1Ajou Univ., Korea, 2Washington Univ. in St. Louis, USA, 3Nat'l Univ. of Singapore, Singapore)</i>	
PS1-052 (04_1076)	Rapid Degradation of Methylene Blue using a DBD Plasma with a Water Circulation System			Hae Kwang Kim ^{1,2} , Min Woo Kim ¹ , Heejae Lee ^{1,3} , Kangil Kim ^{1,4} and Yongcheol Hong ^{1,4} <i>(1KFE, Korea, 2Chungbuk Nat'l Univ., Korea, 3Jeonbuk Nat'l Univ., Korea, 4UST, Korea)</i>	
PS1-053 (04_1062)	Control of the Ion Flux Incident on the Wafer by the Focus Ring Parameters in Capacitively Coupled Plasmas for the Semiconductor Etching Process			Cheongbin Cheon, Hwanho Kim, and Hae June Lee <i>(Pusan Nat'l Univ., Korea)</i>	
PS1-054 (04_1051)	Triple-Frequency Power Configuration's Impact on Silicon Dioxide Etch Rate in C4F8/C4F6/Ar/O2 Plasma			Jong Hyeon Shin, Yonghyun Kim, Jong-Bae Park, and JongSik Kim <i>(KFE, Korea)</i>	
PS1-055 (04_1050)	A Novel Technique for the Enhanced Volume Production of Negative Hydrogen Ion via Plasma Anode Spot			Jaeyoung Choi ¹ , Y. S. Hwang ¹ , Kyoung-Jae Chung ¹ , and June Young Kim ² <i>(1Seoul Nat'l Univ., Korea, 2Korea Univ., Korea)</i>	
PS1-056 (04_1049)	Investigating the Role of Wall-coating Polymer Films on Plasma Deposition in Inductively-coupled C4F8/Ar Plasmas			Woojin Park, Jonggu Han, Sangjun Park, Solee Park, and Se Youn Moon <i>(Jeonbuk Nat'l Univ., Korea)</i>	
PS1-057 (04_1047)	Impacts on PEDOT:PSS by VUV Photons Emitted from the Plasma used for Electrostatic Charge Elimination			Solee Park, Woojin Park, and Se Youn Moon <i>(Jeonbuk Nat'l Univ., Korea)</i>	
PS1-058 (04_1046)	Beam Extraction of Cs Injected Negative Ion Beam Source in Korea Institute of Fusion Energy (KFE)			Jae Young Jang ^{1,3} , Byungkeun Na ² , Min Park ¹ , SeulChan Hong ^{1,3} , Byoung-Seung Kim ⁴ , Jinhyun Jeong ¹ , Jong-Gu Kwak ¹ , and Y. S. Hwang ³ <i>(1KFE, Korea, 2ITER, France, 3Seoul Nat'l Univ., Korea, 4UST-KFE School, Korea)</i>	
PS1-059 (04_1045)	Synthesis of Single-Walled Carbon Nanotubes from Methane by DC Thermal Plasma			Seong-Pyo Kang, Han Jun Lee, Se Jin Oh, and Tae-Hee Kim <i>(Wonkwang Univ., Korea)</i>	
PS1-060 (04_1035)	Green Hydrogen Production via Ammonia Decomposition Using Thermal Plasma			Han Jun Lee, Seong-Pyo Kang, Se Jin Oh, and Tae-Hee Kim <i>(Wonkwang Univ., Korea)</i>	

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Presentation Code	Title			Authors	
PS1-061 (04_1019)	Cylindrical Coordinate 2.5D Particle-In-Cell Simulation for Inductively Coupled Plasma Studies			Jungmin Kim, Joonho Son, Hyunjun Cho, Jaewook Han, Yunho Jeong, Jiheon Song, and Jungpyo Lee <i>(Hanyang Univ., Korea)</i>	
PS1-063 (05_1024)	Development of a Cavity Resonance Control System for RAON SCL3			Hyojae Jang, Youngkwon Kim, and Myung Ook Hyun <i>(IBS, Korea)</i>	
PS1-064 (05_1022)	Development of ad Aluminum Vacuum Chamber for the Korea-4GSR			Hosun Choi, Sehyun Kim, Jinkyu Kim, Mansoo Hong, Hyuckchae Kwon, and Taekyun Ha <i>(PAL, Korea)</i>	
PS1-065 (05_1006)	Design and Analysis of Frequency Tuner for Single Spoke Resonator Type-1 (SSR1) Superconducting Cavity in IRIS			Myung Ook Hyun ¹ , Youngkwon Kim ¹ , Yongwoo Jo ¹ , Daeboo Cha ² , and Dongkeun Lee ² <i>(1IBS, Korea, 2Vitzronextech, Korea)</i>	
PS1-066 (05_1003)	Mechanical Surface Polishing for Metal Ablation in Laser Wakefield Acceleration			Hyeon Woo Lee, Sang Yun Shin, and Seong Hee Park <i>(Korea Univ. Sejong, Korea)</i>	
PS1-068 (04_1021)	Development of a Helicon Source for Neutral Beam Etching			Dongha Kim ¹ , Donguk Kim ¹ , Bongki Jung ² , Namkyun Kim ³ , Seungbo Shim ³ , and Choongki Sung ¹ <i>(1KAIST, Korea, 2KAERI, Korea, 3Samsung Electronics Co. Ltd., Korea)</i>	

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PS2-001 (01_1070)	Magnetic Equilibrium Reconstruction in VEST			Hong-Sik Yun ¹ , Laurent Terzolo ² , Gunwoo Nam ¹ , Taekyoung Kim ¹ , Choongki Sung ³ and Y.S. Hwang ¹ <i>(1Seoul Nat'l Univ., Korea, 2KFE, Korea, 3KAIST, Korea)</i>	
PS2-002 (01_1068)	SOLPS-ITER Modelling of KSTAR L-mode Plasmas with Drifts and Currents			Junghoo Hwang ¹ , Jae-Sun Park ² , Richard A. Pitts ³ , Xavier Bonnin ³ , Hyungho Lee ⁴ , Suk-Ho Hong ⁵ , and Wonho Choe ¹ <i>(1KAIST, Korea, 2ORNL, USA, 3ITER Organization, France 4KFE, Korea, 5General Atomics, USA)</i>	
PS2-003 (01_1067)	Strike Point Control for a new Tungsten Divertor in KSTAR			Giwook Shin ¹ , N. Eidietis ² , S.-H. Hahn ¹ , J. Barr ² , Y.H. Lee ¹ , W. Choi ² , and H.S. Han ¹ <i>(1KFE, Korea 2General Atomics, USA)</i>	
PS2-004 (01_1066)	Development of Differential Pumping System for Radiative Divertor Study in KAIMIR			D. Oh, G. W. Baek, D. Kim, and C. Sung <i>(KAIST, Korea)</i>	
PS2-005 (01_1051)	Optimizing Multiple Quasi-Symmetries in a Single Stellarator Device			Tae-Geun Jeong ¹ , Jun-Young Jang ¹ , R. Conlin ² , D. Panici ² , Caoxiang Zhu ³ , and Jong-Kyu Park ¹ <i>(1Seoul Nat'l Univ., Korea, 2Princeton Univ., USA, 3Univ. of Science and Tech. of China, China)</i>	
PS2-006 (01_1052)	Investigating Basic Profiles and Equilibria for K-DEMO			Jae-Beom Cho ¹ , Jay-Myoung Lee ¹ , Min-Soo Cha ¹ , Christopher Hansen ² , Seong-Jun Han ¹ , and Jong-Kyu Park ¹ <i>(1Seoul Nat'l Univ., Korea, 2Columbia Univ., USA)</i>	
PS2-007 (01_1049)	Development of a Gyrokinetic Code for Whole-tokamak Plasma Simulation			Janghoon Seo ¹ , Gahyung Jo ¹ , Jae-Min Kwon ¹ , and Eisung Yoon ² <i>(1KFE, Korea, 2UNIST, Korea)</i>	
PS2-008 (01_1047)	Finding Interactions between Modes Decomposed from GENE Output with DMD Algorithm			Dami Jung ¹ , Eisung Yoon ¹ , and Jae-Min Kwon ² <i>(1UNIST, Korea, 2KFE, Korea)</i>	
PS2-009 (01_1040)	Integrated Modeling of KSTAR Plasmas with Tungsten Divertor Using JINTRAC			B.S. Kim ^{1,2} , S.H. Kim ² , F. Koechl ² , C.Y. Lee ³ , F. Casson ⁴ , R. Futtersack ⁴ , and Y.-S. Na ¹ <i>(1Seoul Nat'l Univ., Korea, 2ITER Organization, France, 3KFE, Korea, 4CCFE, UK)</i>	
PS2-010 (01_1035)	Study on the Lyapunov Exponent and Entropy of Metastable State in KSTAR Plasma			Jun-Ho Yeom <i>(KFE, Korea)</i>	

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PS2-011 (01_1033)	Attempts to RMP-driven ELM Crash Suppression in KSTAR under Tungsten Monoblock-type Lower Divertor			Minwoo Kim ¹ , SangKyeun Kim ² , SeongMoo Yang ² , Gunyoung Park ¹ , and Won-Ha Ko ¹ <i>(1KFE, Korea, 2PPPL, USA)</i>	
PS2-012 (01_1029)	Physics-informed Neural Networks for Kinetic Equilibrium Reconstruction and Transport of Fusion Plasmas			Jaeyeong Kim and Jaemin Seo <i>(Chung-Ang Univ., Korea)</i>	
PS2-013 (01_1028)	Plasma Startup Experiment with the Newly Installed Lower Tungsten Divertor of KSTAR			Jeongwon Lee, Jayhyun Kim, Hyunsun Han, Youngho Lee, Sang-hee Hahn, Jun-Gyo Bak, Mi Joung, Woong-Chae Kim, and Si-Woo Yoon <i>(KFE, Korea)</i>	
PS2-014 (01_1025)	Simulating the ITER Baseline Scenario Plasma Ramp-up on KSTAR			W. Choi ¹ , H. Anand ¹ , J. Barr ¹ , N. Eidietis ¹ , S.H. Hahn ² , Y.H. Lee ² , and A. Welander ¹ <i>(1General Atomics, USA, 2KFE, Korea)</i>	
PS2-015 (01_1022)	Development of the Novel Tungsten Erosion Rate Diagnostics based on Multiple Spectral Lines			Changmin Shin ^{1,2} , Duck-Hee Kwon ² , Haewon Shin ² , Kil-Byoung Chai ² , and Wonho Choe ¹ <i>(1KAIST, Korea, 2KAERI, Korea)</i>	
PS2-016 (01_1015)	SOLPS-ITER Modeling of Divertor Plasma Detachment in KSTAR through Argon Control GasInjection			Chanyeong Lee ¹ , Junghoo Hwang ¹ , Haewon Shin ² , Yoon Seong Han ¹ , Hyungho Lee ³ , and Wonho Choe ¹ <i>(1KAIST, Korea, 2KAERI, Korea, 3KFE, Korea)</i>	
PS2-017 (01_1014)	Verification of a New 4-D Fokker-Planck Code Development and its Applicationsfor a Tokamak			Hyeonjun Lee ¹ , Yunho Jeong ¹ , Gyeonghoon Pyeon ¹ , Eisung Yoon ² , Tongnyeol Rhee ³ , YongSu Na ⁴ , and Jungpyo Lee ¹ <i>(1Hanyang Univ., Korea, 2UNIST, Korea, 3KFE, Korea, 4Seoul Nat'l Univ., Korea)</i>	
PS2-018 (01_1013)	Neoclassical Impurity Transport by ICRH with 4-D Fokker-Planck Code			Yunho Jeong ¹ , Hyeonjun Lee ¹ , Eisung Yoon ² , and Jungpyo Lee ¹ <i>(1Hanyang Univ., Korea, 2UNIST, Korea)</i>	
PS2-019 (01_1009)	Radial Insights into Turbulence Suppression via Fast Ions for Plasma Confinement			Il-Hwan Kim and Jaemin Seo <i>(Chung-Ang Univ., Korea)</i>	
PS2-020 (02_1050)	Fabrication and Mechanical Properties Characterization of the W-Cr Composite with Enhanced Toughness for Plasma-Facing Material			Sungmin Lee, Jeongseok Kim, Nojun Kwak, and Heung Nam Han <i>(Seoul Nat'l Univ., Korea)</i>	

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Date	June 26 (Wed.), 2024	Presentation Time	PS1 - 13:30~14:50 PS2 - 16:40~18:00	Place	Olympia Hall (1F)
Presentation Code	Title			Authors	
PS2-021 (02_1048)	Electromagnetic Analysis of Upper Port #18 for ITER Diagnostics			Duck Young Ku, Jaemin Kim, Heejin Shim, and MunSeong Cheon <i>(KFE, Korea)</i>	
PS2-022 (02_1045)	Observation of W Blister Formation and Sputtering by Obliquely Incident Ions in Weakly Magnetized Deuterium Plasma			Myeong-Geon Lee, Ki-Baek Roh, and Gon-Ho Kim <i>(Seoul Nat'l Univ., Korea)</i>	
PS2-023 (02_1044)	A Comprehensive Study on Manufacturing and Inspection of Spirallock Threads for Standard parts of ITER Blanket Shield Block			Junsung Chang ¹ , Sawoong Kim ¹ , Jiyoung Jeong ¹ , Jaepoong Yoo ² , Chongmin Jang ² , and Sungsil Bae ² <i>(1KFE, Korea, 2VITZROTECH, Korea)</i>	
PS2-024 (02_1038)	Evolution of MHD Equilibriums during the Ohmic-LHI Combined Operation in Versatile Experiment Spherical Torus			Taekyoung Kim, JongYoon Park, Soobin Lim, T.H. Eom, W.S. Lee, and Y.S. Hwang <i>(Seoul Nat'l Univ., Korea)</i>	
PS2-025 (02_1036)	Modification of KSTAR Ground Current Detection System, and the Operation Results			Young Min Park, Jae Hoon Choi, and Taegu Lee <i>(KFE, Korea)</i>	
PS2-026 (02_1032)	Preparation of a Hydraulic Factory Acceptance Tests for Diagnostic Shielding Modules of ITER Diagnostic Ports in Budker Institute of Nuclear Physics			Boris Solomatin ¹ , Alexander Burdakov ^{1,3} , Svetlana Gagarina ¹ , Dmitriy Gavrilenko ¹ , Maxim Ivantsivskiy ¹ , Dmitry Kravtsov ² , Evgeniy Shavunin ¹ , Andrey Shoshin ^{1,3,4} , Nina Sorokina ² , and Yuliy Sulyaev ^{1,4} <i>(1BINP, Russia, 2Institution Project Center ITER (RF DA), Russia, 3Novosibirsk State Technical Univ., Russia, 4Novosibirsk State Univ, Russia)</i>	
PS2-027 (02_1028)	Commissioning Progress of First 170 GHz Gyrotron for KSTAR ECH			Mi Joung, Son-Jong Wang, Sung-GuG Kim, In-Hyuk Rhee, Jong-Won Han, and Jong-Gu Kwak <i>(KFE, Korea)</i>	
PS2-028 (02_1016)	Integration of the ECE Diagnostic Code into IMAS			Seyeon Heo and Jungpyo Lee <i>(Hanyang Univ., Korea)</i>	
PS2-029 (02_1011)	Commissioning Test of Q2 Oxidation Process for Coolant Purification System			Seok-Kwon Son ¹ , Chang Wook Shin ² , Myungho Kim ¹ , Soon Chang Park ¹ , Youngmin Lee ¹ , and Mu Young Ahn ¹ <i>(1KFE, Korea, 2KAERI, Korea)</i>	
PS2-030 (02_1009)	A Comparison of Efficiency on Lithium Isotope Separation by Different Crown Ether Types			Young Ah Park ^{1,2} , Young Soo Yoon ² , and Yi-Hyun Park ¹ <i>(1KFE, Korea, 2Gachon Univ., Korea)</i>	

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Presentation Code	Title			Authors	
PS2-031 (02_1008)	Alternate Designs of Superconducting Coils for a High Field Test Facility			Soun Pil Kwon <i>(KFE, Korea)</i>	
PS2-032 (02_1007)	A RAMI Analysis for Helium Cooling System (HCS) from HCCP-BB			Youngmin Lee ¹ , Chang Shuk Kim ¹ , Myungho Kim ¹ , Changwook Shin ² , Seok-Kwon Son ¹ , and Mu-Young Ahn ¹ <i>(1KFE, Korea, 2KAERI, Korea)</i>	
PS2-033 (02_1006)	Updates and Validation of rEFIT for the 2023 KSTAR Campaign			Youngho Lee ¹ , S.H. Hahn ¹ , W. Choi ² , G.W. Shin ¹ , N. Eidietis ² , J. Barr ² , H.S. Kim ¹ , and J. Chung ¹ <i>(1KFE, Korea, 2General Atomics, USA)</i>	
PS2-034 (02_1005)	Experimental Study on Tritium Release Properties of Li ₂ TiO ₃ pebbles as Tritium Breeder Material for Fusion Reactor			Yi-Hyun Park ¹ , Young Ah Park ^{1,2} , Mu-Young Ahn ¹ , and Haixia Wang ³ <i>(1KFE, Korea, 2Gachon Univ., Korea, 3INEST, China)</i>	
PS2-035 (03_1070)	Measurement of Time-averaged Ion Energy Distributions in Pulsed Inductively Coupled Nitrogen Plasma			Dae-Chul Kim, Jong-Sik Kim, Yonghyun Kim, and Young-Woo Kim <i>(KFE, Korea)</i>	
PS2-036 (03_1069)	Experience Learned from the Fabrication of 316L(N)-IG Forging for ITER Diagnostics Components			Heejin Shim, Jaemin Kim, Changrae Seon, MunSeong Cheon <i>(KFE, Korea)</i>	
PS2-037 (03_1058)	Focus Ring Effect on the Electron Heating Mechanism in a Pulsed Capacitive RF Plasma Investigated with a Two-dimensional PIC Simulation			Sun Jeong Hwang and Hae June Lee <i>(Pusan Nat'l Univ., Korea)</i>	
PS2-038 (03_1056)	A Comparison of the Electrostatic with the Electromagnetic Effects in Capacitively Coupled Ar Plasmas using a Two-dimensional Particle-in-cell Simulation			Ji Hyun Shin and Hae June Lee <i>(Pusan Nat'l Univ., Korea)</i>	
PS2-039 (03_1055)	Quantum Chemical Calculations for Optical Emission Spectra			Young Choon Park ¹ , Ajith Perara ² , Mi-Young Song ¹ , and Rodney J. Bartlett ² <i>(1KFE, Korea, 2Univ. of Florida, USA)</i>	
PS2-040 (03_1051)	NH ₃ /O ₂ Reaction Analysis in a Plasma Pre-treatment System using a Global Model			Geon U Baek, Cheongbin Cheon, Cheol Woong Kim, and Hae June Lee <i>(Pusan Nat'l Univ., Korea)</i>	

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PS2-041 (03_1048)	Measurement of Electron Drift Velocity and Its Theoretical Validation in E×B Penning Source			Changsu Kim, Subin Lee, Jungmin Park, Gayoung Sim, and June Young Kim <i>(Korea Univ., Korea)</i>	
PS2-042 (03_1043)	Analysis of the SPI-Induced Abrupt and Large Density Change Measured by KSTAR Dispersion Interferometer			Dong-Geun Lee1, Kwan Chul Lee2, J.-W. Juhn2, Jae-seok Lee1, Jayhyun Kim2, S.H. Park2, Michael Lehnen3, and Y.-c. Ghim1 <i>(1KAIST, Korea, 2KFE, Korea, 3ITER Organization, France)</i>	
PS2-043 (03_1040)	ECE Imaging System with Toroidal Dual-Channel Configuration and a Broadband Subsystem for Measurement of Turbulence and Waves on the KSTAR			Dong-Kwon Kim1,2, Jaehyun Lee2, Dong Jae Lee2, and Gunsu S. Yun1 <i>(1POSTECH, Korea, 2KFE, Korea)</i>	
PS2-044 (03_1039)	Fiber-Optic Bolometer System Design with Improved Electromagnetic Interference for Plasma Radiation Measurement			Jinhyeon Choi, Donghwan Kim, and Sooseok Choi <i>(Jeju Nat'l Univ., Korea)</i>	
PS2-045 (03_1038)	Development of a Resistive Bolometer for Fusion Plasma Diagnostic			Donghwan Kim1, Jinhyeon Choi1, Dongjae Kwak2, and Sooseok Choi1 <i>(1Jeju Nat'l Univ., Korea 2POSTECH, Korea)</i>	
PS2-046 (03_1026)	Conceptual Design of Lyman Alpha Diagnostic for KSTAR			Jae-seok Lee1,2, Kwan-chul Lee2, and Young-Chul Ghim1 <i>(1KAIST, Korea, 2KFE, Korea)</i>	
PS2-047 (03_1025)	Investigation of Fractional Beam Energy Components for Radial Electric Field Measurements			Juyoung Ko1,2 and Jinseok Ko1,2 <i>(1KFE, Korea, 2UST, Korea)</i>	
PS2-048 (03_1022)	Inversion Process of He2+ Charge Exchange Signal in the VEST			TaeHee Eom1, Wonseok Lee1, C. Sung2, Soo-Ghee Oh1, and Y.S. Hwang1 <i>(1Seoul Nat'l Univ., Korea, 2KAIST, Korea)</i>	
PS2-049 (03_1021)	Minimizing Optical Fiber Positioning Errors in Calibration: Polychromator Design for KSTAR			Jong-ha Lee1,2, Hajin Kim1, Geunhyeong Park1,2, Young-Gi Kim1, Jung-Hwa Kim3, Jongmin Lee3, Ichihiro Yamada4, and Hisamichi Funaba4 <i>(1KFE, Korea, 2UST, Korea, 3Seoul Nat'l Univ., Korea, 4Nat'l Inst. for Fusion Science, Japan)</i>	
PS2-050 (03_1012)	Electron Density Profiles and Light Refraction in X-pinch Plasmas Using a Mach-Zehnder Interferometer Imaging System			Seungmin Bong1, Su-San Park2, Yong Sung You1, Seunggi Ham2, Jonghyeon Ryu2, Jongmin Lee2, YeongHwan Choi2, Kyoung-Jae Chung2, Y. S. Hwang2, and Young-chul Ghim1 <i>(1KAIST, Korea, 2Seoul Nat'l Univ., Korea)</i>	

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Presentation Code	Title			Authors	
PS2-051 (03_1010)	Testing the Feasibility of Divertor Thomson Collection Lens for KSTAR through Simulation			G.H. Park ^{1,2} , H.J. Kim ² , and J.H. Lee ^{1,2} <i>(1UST-KFE School, Korea, 2KFE, Korea)</i>	
PS2-052 (03_1009)	Measurements of Tungsten Emission with Extreme UV Spectroscopy System for Tungsten Divertor on KSTAR			Junhyeok Yoon ¹ , Changrae Seon ² , Haewon Shin ³ , Chanyeong Lee ¹ , Yoonseong Han ¹ , Hyungho Lee ² , and Wonho Choe ¹ <i>(1KAIST, Korea, 2KFE, Korea, 3KAERI, Korea)</i>	
PS2-053 (03_1004)	Measurement of Line Integrated Density Moments by using Frequency Sweep Interferometer			Seong-Heon Seo <i>(KFE, Korea)</i>	
PS2-054 (03_1003)	New Langmuir Probe System and First Measurement in Upgraded Tungsten Divertor of KSTAR			Eunnam Bang ¹ , Hung Su Kim ¹ , Jun-gyo Bak ¹ , Hyungho Lee ¹ , Yegeon Lim ² , Seungmin Bong ³ , and Y.-c Ghim ³ <i>(1KFE, Korea, 2Caltech, USA, 3KAIST, Korea)</i>	
PS2-055 (04_1048)	Impact of Inhomogeneous Magnetic Fields on the Deposition Process in Low-pressure Capacitively Coupled Ar/C4F8 Plasmas			Jihoon Kim, Jonggu Han, Woojin Park, Sangjun Park, and Se Youn Moon <i>(Jeonbuk Nat'l Univ., Korea)</i>	
PS2-056 (04_1033)	Beamlet-Based Neutral Beam Trajectory Modeling for Geometrical Losses in the KSTAR			Byoung-Seung Kim ^{1,2} , J. H. Jeong ² , Wook Cho ² , Jaewook Kim ² , SeulChan Hong ^{2,3} , Hyun-Teak Park ² , Jae Young Jang ^{2,3} and Jong-Gu Kwak ² <i>(1UST-KFE School, Korea, 2KFE, Korea, 3Seoul Nat'l Univ., Korea)</i>	
PS2-057 (04_1032)	Analysis of Microwave-driven Plasma Plume for Small-sized Space Propulsion			Kyungtae Kim ¹ , Kil-Byoung Chai ² , and Gunsu Yun ¹ <i>(1POSTECH, Korea, 2KAERI, Korea)</i>	
PS2-058 (04_1027)	Investigation of Plasma Properties in Ar/SiH4 Inductively Coupled Plasma Discharge Simulation using EEDF Obtained from Solution of Boltzmann Equation			Ji-Hoon Kim ¹ , Gwan Kim ¹ , Hee-Hwan Choe ¹ , Hyo-Chang Lee ¹ , and Deuk-Chul Kwon ² <i>(1Korea Aerospace Univ., Korea, 2KFE, Korea)</i>	
PS2-059 (04_1022)	PeiREX Solution for Intelligent Semiconductor Plasma Processing Equipment			JungHo Song and Ki-Hwan Cho <i>(KFE, Korea)</i>	
PS2-060 (04_1016)	Effect of Sidewall Filtering and Process Condition in a Capacitively Coupled Plasma			Sang-Hyeok Park, Yonghyun Kim, and Jongsik Kim <i>(KFE, Korea)</i>	

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PS2-061 (04_1014)	Characterization of Low-Frequency Oscillations in an E×B Penning Source			Jinyoung Choi ¹ , Kyoung-Jae Chung ¹ , and June Young Kim ² <i>(1Seoul Nat'l Univ., Korea, 2Korea Univ., Korea)</i>	
PS2-062 (04_1009)	Pressure Calculation and Beam Extractor Redesign for Minimizing Negative Ion Beam Loss from Ion Source to Target			Tae-Seong Kim, Kihyun Lee, Seung Ho Jeong, and Dae-sik Chang <i>(KAERI, Korea)</i>	
PS2-063 (04_1006)	Operating Characteristics of Stretchable and Flexible Surface Dielectric Barrier Discharges			Seong-Cheol Huh, Jeongsu Pyeon, Hyoungsoo Kim, Sanghoo Park, and Wonho Choe <i>(KAIST, Korea)</i>	
PS2-064 (04_1005)	Dielectric Particle Motion in High-Voltage AC Electric Fields: An Experimental Study			Dong Chan Seok, Seungryul Yoo, Kang Il Lee, Yong Sup Choi, and Yong Ho Jung <i>(KFE, Korea)</i>	
PS2-065 (04_1004)	Characterization of Multiple Pin-to-Plate Electrode DBD Plasma Driven by Nanosecond Pulsed High Voltage and its Application to Bacterial Inactivation			Min-Jeong Seong, Kyu-Ri Park, S. J. Kim, Hea-Min Joh, and T. H. Chung <i>(Dong-A Univ., Korea)</i>	
PS2-066 (04_1068)	Plasma Assisted High Performance Logic Diode Based on MoS ₂ Homojunction			Yasir Hassan and Min Sup Choi <i>(Chungnam Nat'l Univ., Korea)</i>	
PS2-067 (04_1064)	Comparative Study of 2D ICP Simulation and Global Model for CF ₄ Plasma Discharge Characteristics			Gwan Kim ¹ , Ji-Hoon Kim ¹ , Hee-Hwan Choe ¹ , and Deuk-Chul Kwon ² <i>(1Korea Aerospace Univ., Korea, 2KFE, Korea)</i>	