

| Time / Date | June 24 (Mon) | | | | |
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| | Room A (Seoul) | Room B (London) | Room C (Rome) | Room D (Athens) | Room E (Berlin) |
| 11:00-12:00 | [GS] General Session Chair: Min Sup Hur (UNIST, Korea) | | | | |
| | (Invited) [GS-1] Simulation of Quantum Electrodynamics (QED) with High Power Lasers using Particle in Cell Code Inhyuk NAM (PAL, Korea) | | | | |
| | (Invited) [GS-2] Diagnosis of Hot and Warm Electrons in Solid-density Plasmas Irradiated by Intense Laser Pulses Leejin BAE (GIST, Korea) | | | | |
| | (Invited) [GS-3] Revisiting Classical Electrodynamics without Renormalization Teyoun KANG (KSA, Korea) | | | | |
| 12:00-13:25 | Lunch Break | | | | |
| 13:25~13:30 | Opening Ceremony (Olympia Hall, 1F) | | | | |
| 13:30~14:50 | Plenary Session 1 (Olympia Hall, 1F) | | Most Probable Compact Ignition Device for Magnetic Fusion Plasmas Hyeon K. PARK (UNIST, Korea) Chair: Yong-Seok HWANG (Seoul Nat'l Univ., Korea) | | |
| | Plenary Session 2 (Olympia Hall, 1F) | | Results of Integrated Commissioning of JT-60SA Shunsuke IDE (QST, Japan) Chair: Siwoo YOON (KFE, Korea) | | |
| 14:50-15:05 | Photo Session* (Olympia Hall, 1F) | | | | |

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| 15:05~16:25 | Plenary Session 3 (Olympia Hall, 1F) IFMIF-DONES: Status and Next Steps Angel IBARRA (IFMIF-Dones, Spain) Chair: Yeongkook OH (KFE, Korea) | | | | |
| | Plenary Session 4 (Olympia Hall, 1F) Particle Dynamics in Collisionless Magnetic Reconnection Seiji ZENITANI (Austrian Academy of Sciences, Austrian) Chair: Young Dae YOON (APCTP, Korea) | | | | |
| 16:25-16:40 | Break | | | | |
| 16:40~18:00 | [Mo1A] AI & ML 1 Chair: Youngmu JEON (KFE, Korea) | [Mo1B] Plasma Simulation Chair: Young Dae YOON (APCTP, Korea) | | [Mo1D] Energy and Environment, etc. 1 Chair: Mi-Young SONG (KFE, Korea) | [Mo1E] Overview & Device Chair: Woongchae KIM (KFE, Korea) |
| | (Invited) [Mo1A-1] Leveraging Deep Reinforcement Learning to Avoid Tearing Mode in DIII-D Jaemin SEO (Chung-Ang Univ., Korea) | (Invited) [Mo1B-1] Canonical Vorticity Model and Particle-in-cell Simulations for Spontaneous Magnetization of Collisionless Plasma Modhuchandra Singh LAISHRAM (APCTP, Korea) | | (Invited) [Mo1D-1] Prospect for the Expansion of Plasma Application in the Field of Energy and Environment Dae Hoon LEE (KIMM, Korea) | (Invited) [Mo1E-1] Experimental overview of the first tungsten divertor campaign on KSTAR Yong Un Nam (KFE, Korea) |
| | (Invited) [Mo1A-2] Data Driven Disruption Prediction using Long Short-term Memory Algorithm in KSTAR Full Carbon State Database Jeongwon LEE (KFE, Korea) | [Mo1B-2] Prediction of Plasma Characteristics Using the Line Ratio Method Derived through Collisional-Radiative Modelling of Low-Pressure Argon Plasma Swati BHARTI (KFE, Korea) | | [Mo1D-2] Microwave Plasma Pyrolysis of Automobile Shredder Residue (ASR): A Pathway to Waste Utilization and Value-added Byproduct Generation Thi Huyen Tran NGO (Chung Yuan Christian Univ., Taiwan) | (Invited) [Mo1E-2] The Tokamak Energy Approach to Addressing the Fusion Energy Materials Challenge Jim PICKLES (Tokamak Energy Ltd, UK) |
| | [Mo1A-3] Uncertainty Quantification and Statistical Analysis of the Time-evolution of Fusion Plasmas Eun-jin KIM (Coventry Univ., UK) | [Mo1B-3] Particle-In-Cell Simulation of Magnetized Low Temperature Plasmas for Current Flow Analysis around a Magnetic X-point Bin AHN (KAIST, Korea) | | [Mo1D-3] Development of Large-Capacity Hybrid POU Scrubber using Combined with Arc + Microwave Plasma and Catalyst Dong Hun SHIN (KFE, Korea) | [Mo1E-3] ITER Sealing Flanges and Korean Procurement Scope Geunhong KIM (KFE, Korea) |
| | [Mo1A-4] Phase Mixing Dynamics Characterization from Data-Driven Reduced Order Model of Plasma Kinetic Simulation Darian FIGUERA-MICHAL (UNIST, Korea) | [Mo1B-4] AF-MPD Thruster-Based Divertor Plasma Simulator for Heat and Particle Fluxes Tests Haewon SHIN (KAERI, Korea) | | [Mo1D-4] Thermal Plasma-synthesized Cobalt Boride Nanoparticles as Electrocatalysts for Water Splitting Jeong-Hwan OH (Jeju Nat'l Univ., Korea) | [Mo1E-4] High-level Operation Scenario of MPD for Fusion Experimental Device Dohee LEE (KFE, Korea) |

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| | Room A (Seoul) | Room B (London) | Room C (Rome) | Room D (Athens) | Room E (Berlin) |
| 09:00-10:20 | Plenary Session 5 (Olympia Hall, 1F) Mesoscopic Transport in Tokamak Plasmas: Avalanches and the E x B Staircase Minjun J. CHOI (KFE, Korea) Chair: Jae-Min KWON (KFE, Korea) | | | | |
| | Plenary Session 6 (Olympia Hall, 1F) Progress in the Development of an Optimal Tokamak Scenario for Steady-state Fusion Reactors Andrea M. GAROFALO (General Atomics, USA) Chair: Jungpyo LEE (Hanyang Univ., Korea) | | | | |
| 10:20-10:40 | Break | | | | |
| 10:40~12:00 | [Tu1A] MHD & 3D Chair: Jayhyun KIM (KFE, Korea) | [Tu1B] Plasma Fundamentals Chair: Gunsu YUN (POSTECH, Korea) | [Tu1C] Accelerator 1 Chair: Moses CHUNG (POSTECH, Korea) | [Tu1D] Energy and Environment, etc. 2 Chair: Dong Hun SHIN (KFE, Korea) | [Tu1E] Magnet Technology Chair: Byungsu LIM (KENTECH, Korea) |
| | (Invited) [Tu1A-1] Advancing Tokamak Disruption Event Characterization and Forecasting Research and Expansion of Real-time Application on KSTAR Steven SABBAGH (Columbia Univ., USA) | (Invited) [Tu1B-1] Optimized Merging Operations of Spherical Tokamak Plasmas for High-Power Ion Heating and Magnetic Helicity Injection Yasushi ONO (Univ. of Tokyo, Japan) | (Invited) [Tu1C-1] Status of Accelerator Systems Development for Korea 4GSR Project Sung-Ju PARK (PAL, Korea) | (Invited) [Tu1D-1] A Study on Highly Effective H ₂ L ₂ -ICP Plasma Technology and Its Application for the Landfill Gas Conversion Yun-Seong LEE (EN2CORE Tech., Korea) | (Invited) [Tu1E-1] Challenges and Potential Solutions for High Temperature Superconductor Compact Fusion Magnet Seungyong HAHN (Seoul Nat'l Univ., Korea) |
| | (Invited) [Tu1A-2] Subcritical Bifurcation from RMP-ELM Mitigation to RMP-ELM Suppression in KSTAR Michael LECONTE (KFE, Korea) | (Invited) [Tu1B-2] Theory of the Weak Parametric Turbulence for the Cylindrical Helicon Plasma Sources Volodymyr MYKHAYLENKO (Pusan Nat'l Univ., Korea) | (Invited) [Tu1C-2] R&D on Attosecond X-ray Pulses at PAL-XFEL Chi Hyun SHIM (PAL, Korea) | [Tu1D-2] Hydrogen Production through Ammonia Decomposition in Thermal Plasma Tae-Hee KIM (Wonkwang Univ., Korea) | [Tu1E-2] Assessment of KSTAR PF1UL Nb ₃ Sn Superconducting Magnets Property after Long Term Operation Since 2008 Hyunjung LEE (KFE, Korea) |
| | [Tu1A-3] Exploring Connection between Electron Temperature Profile Evolution and Disruptions in KSTAR Through Disruption Event Characterization and Forecasting (DECAF) Analysis Guillermo BUSTOS RAMIREZ (Columbia Univ., USA) | [Tu1B-3] Parametric Study on Runaway Electron Beam Scattering through Resonant Interactions with Plasma Waves for RF Diagnostics Hye Lin KANG (POSTECH, Korea) | [Tu1C-3] Revised Hamiltonian near Third-Integer Resonance and Implications for Electron Storage Ring KiMoon NAM (POSTECH, Korea) | [Tu1D-3] Plasma Assisted Ammonia Cracking at Atmospheric Conditions Avik DENRA (Jeju Nat'l Univ., Korea) | [Tu1E-3] The Progress of Developing a KSTAR PF Temperature Prediction Method using Deep Learning Model Giil KWON (KFE, Korea) |
| | [Tu1A-4] Parallel Flow Response to Resonant Perturbations in High β Plasmas Yeongsun LEE (Seoul Nat'l Univ., Korea) | | | [Tu1D-4] One-pot Synthesis of Single Crystal CuS Nanoparticles by Underwater Plasma Discharge Sang Yun JEONG (KFE, Korea) | [Tu1E-4] Initial 3D Coil Design and Optimization in VEST Gwang Geun SEO (Seoul Nat'l Univ., Korea) |
| 12:00-13:30 | Lunch Break | | | | |

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| 13:30~14:50 | Plenary Session 7 (Olympia Hall, 1F) Quantum Computing for Plasma Physics: State of the Art and Potential Opportunities Ilya DODIN (PPPL, USA) Chair: Min Sup HUR (UNIST, Korea) | | | | |
| | Plenary Session 8 (Olympia Hall, 1F) Overview of Magnetic Fusion Diagnostics and Data Analysis Technologies Sándor ZOLETNIK (Centre for Energy Research, Hungary) Chair: Yong Un NAM (KFE, Korea) | | | | |
| 14:50-15:05 | Break | | | | |
| 15:05~16:25 | [Tu2A] Modeling & Simulation Chair: Gyungjin CHOI (Seoul Nat'l Univ., Korea) | [Tu2B] Fusion Diagnostics 1 Chair: Choongki SUNG (KAIST, Korea) | [Tu2C] Accelerator 2 Chair: Dong-O JEON (IBS, Korea) | [Tu2D] Functional Material Chair: Sang Yun JEONG (KFE, Korea) | [Tu2E] HCD Chair: EunMi CHOI (UNIST, Korea) |
| | (Invited) [Tu2A-1] Recent Progress on IPS-FASTRAN Integrated Modeling for Tokamak Pulse Simulation and Fusion Pilot Plant Design Jin Myung PARK (ORNL, USA) | (Invited) [Tu2B-1] Current Status of the Energetic Particle Diagnostics in KSTAR Junghee KIM (KFE, Korea) | (Invited) [Tu2C-1] Operational Status of KOMAC Proton Linac Han-Sung KIM (KAERI, Korea) | (Invited) [Tu2D-1] Nondestructive Single-atom-thick Crystallographic Scanner for 2D Materials Jae-Hyun LEE (Ajou Univ., Korea) | (Invited) [Tu2E-1] Overview of the PPPL RF Modeling Activities Nicola BERTELLI (PPPL / Princeton Univ., USA) |
| | (Invited) [Tu2A-2] The FUSE Framework and Its Use for Reactor Design Optimization Orso MENEHINI (General Atomics, USA) | (Invited) [Tu2B-2] Update on a 2-Dimensional, Divertor Thomson Scattering (DTS2D) System on DIII-D Fenton GLASS (General Atomics, USA) | [Tu2C-2] Design and Beam Dynamics of a High-Power D+ Linear Accelerator to Generate Fusion-Like Neutrons for Breeding Blanket Tests in Korea Emre COSGUN (UNIST, Korea) | (Invited) [Tu2D-2] High-Rate Production of Si/SiOx Nanomaterials by Tandem-Modulated Induction Thermal Plasmas for Anode Material of Lithium Ion Battery Yasunori TANAKA (Kanazawa Univ., Japan) | [Tu2E-2] Overall Status of RF System Preparation for the Lower Hybrid Fast Wave Current Drive Research on KSTAR Sun Ho KIM (a, Korea) |
| | [Tu2A-3] Digital Twin Technology for Fusion –What, Why, and How? Jae-Min KWON (KFE, Korea) | [Tu2B-3] Upgrade of Motional Stark Effect Diagnostic for Radial Electric Field Measurements in KSTAR Jinseok KO (KFE, Korea) | | [Tu2D-3] Etching of 2D Materials via Plasma Electron-enhanced Etching (PE2) Jong-Bae PARK (KFE, Korea) | [Tu2E-3] Application of Advanced NBI Control System to FIRE Mode Experiments in KSTAR SeulChan HONG (KFE, Korea) |
| | [Tu2A-4] Orthogonal Grids of the Poloidal Flux and Jacobian in Tokamak Equilibrium Minho WOO (KFE, Korea) | [Tu2B-4] Investigation of the Behavior of Effective Charge (Zeff) in KSTAR Plasmas Juhyeok JANG (KFE, Korea) | | | [Tu2E-4] Merging Plasma Startup Assisted by Electron Bernstein Wave Heating Preionization with TPC on Partial Solenoid Configuration in VEST JunHyeok BYUN (Seoul Nat'l Univ., Korea) |
| 16:25-16:40 | Break | | | | |
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| | Room A (Seoul) | Room B (London) | Room C (Rome) | Room D (Athens) | Room E (Berlin) |
| 16:40~18:00 | [Tu3A] Transport 1 Chair: Min-Gu YOO (GA, USA) | [Tu3B] Fusion Diagnostics 2 Chair: Yong Un NAM (KFE, Korea) | [Tu3C] Accelerator 3 Chair: Sung-Ju PARK (PAL, Korea) | [Tu3D] Semiconductor and Display Applications Chair: Sijun KIM (Chungnam Nat'l Univ., Korea) | [Tu3E] PWI / Divertor Chair: Heung Nam HAN (Seoul Nat'l Univ., Korea) |
| | (Invited) [Tu3A-1] Potential Vorticity Conservation and ExB Zonal Flow's Spatial Structure in Magnetized Plasmas Taik Soo HAHM (Seoul Nat'l Univ., Korea) | (Invited) [Tu3B-1] Current Status and Prospects of Diagnostic Systems in Versatile Experiment Spherical Torus (VEST) Choongki SUNG (KAIST, Korea) | (Invited) [Tu3C-1] Design Study of a Dielectric Terahertz Undulator Jinjoo KO (Korea Univ. Sejong, Korea) | [Tu3D-1] Enhancement of the Chamber Cleaning Rate in the Remote Plasma Dry Cleaning System Seyun JO (Myongji Univ., Korea) | (Invited) [Tu3E-1] Study on the Tungsten Source and Transport during the First Operation of the Tungsten Cassette Mono-block Divertor in the KSTAR Tokamak Hyungho LEE (KFE, Korea) |
| | (Invited) [Tu3A-2] On the Isotopic Dependence of Energy Confinement from Current to Future Tokamaks Lei Qi (KFE, Korea) | [Tu3B-2] Real-time Spectroscopy Hardware and Software Design and Initial Results from KSTAR 23-24 Campaign Keith ERICKSON (Princeton Univ., USA) | (Invited) [Tu3C-2] Status of Magnet System for Korea 4GSR Dong-Eon KIM (POSTECH, Korea) | [Tu3D-2] Investigation of Control Parameter on Wafer Edge Process Uniformity Using Edge Ring Focused Plasmas Namjae BAE (Seoul Nat'l Univ., Korea) | [Tu3E-2] The Effect of Potassium Doping on Incipient Plasticity and Ductile-to-brittle Transition Temperature of Tungsten Jeongseok KIM (Seoul Nat'l Univ., Korea) |
| | [Tu3A-3] Modeling Neoclassical High-Z Impurity 2-D Transport in Realistic Tokamak Configurations Hyojong LEE (Hanyang Univ., Korea) | [Tu3B-3] Real-time Thomson Scattering Diagnostics for Plasma Control on LHD Hisamichi FUNABA (NIFS, Japan) | [Tu3C-3] Enhancing Conversion Efficiency of Plasma Dipole Oscillators for THz-based Linear Accelerators Jaeho LEE (UNIST, Korea) | [Tu3D-3] Analysis on Non-maxwellian Electron Energy Distribution Function Variation in Narrow Gap VHF-CCP Ji-Won KWON (Seoul Nat'l Univ., Korea) | [Tu3E-3] The Effect of an Atomic Hydrogen on the Kink Formation in a <111>{110} Screw Dislocation in Bcc Tungsten: Atomistic Study Keonwook KANG (Yonsei Univ., Korea) |
| | [Tu3A-4] Role of Charge Exchange Reactions on the L-H Transition and Plan for the Measurement of Neutral Density Profile on KSTAR Kwan Chul LEE (KFE, Korea) | [Tu3B-4] Effective Charge Measurements in Versatile Experiment Spherical Torus (VEST) Jeongwon YOO (KAIST, Korea) | | [Tu3D-4] The Effect of Gradient DC Magnetic Field in a Dual Frequency Inductively Coupled Plasma Yilang JIANG (Hanyang Univ., Korea) | |
| | | | | [Tu3D-5] Modulating Electron Energy Probability Functions with 2 MHz Power in Dual-Frequency (2/27.12 MHz) Inductively Coupled Plasma: Effects of Oxygen/Argon Discharges at Low Pressure Yeong Jae JEONG (Hanyang Univ., Korea) | |
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| Time / Date | June 26 (Wed) | | | | |
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| | Room A (Seoul) | Room B (London) | Room C (Rome) | Room D (Athens) | Room E (Berlin) |
| 09:00-10:20 | Plenary Session 9 (Olympia Hall, 1F) Overview of Artificial Intelligence and Machine Learning for Fusion Applications Egemen KOLEMEN (Princeton Univ., USA) Chair: Jaemin SEO (Chung-Ang Univ., Korea) | | | | |
| | Plenary Session 10 (Olympia Hall, 1F) Measuring the Phase Space Transport of Energetic Particles William HEIDBRINK (UC Irvine, USA) Chair: Gyungjin CHOI (Seoul Nat'I Univ., Korea) | | | | |
| 10:20-10:40 | Break | | | | |
| 10:40~12:00 | [We1A] Major Devices 1 Chair: Minjun CHOI (KFE, Korea) | [We1B] Plasma Diagnostics and Sensor Tech. 1 Chair: Se Youn MOON (Jeonbuk Nat'I Univ., Korea) | [We1C] Plasma-Accelerator 1 Chair: Kitae LEE (KAERI, Korea) | [We1D] Emerging Simulation Tech. Chair: Deuk-Chul KWON (KFE, Korea) | [We1E] Control & PS Chair: Jaemin SEO (Chung-Ang Univ., Korea) |
| | (Invited) [We1A-1] Assessing the Impact of the Tungsten Environment on High-Performance Scenarios in KSTAR: Initial Results Jinil CHUNG (KFE, Korea) | (Invited) [We1B-1] A Voltage and Current Sensor with a Floating Toroidal Coil: Principle and its Application to Plasma Diagnostics with a Unified Global Model Sijun KIM (Chungnam Nat'I Univ., Korea) | (Invited) [We1C-1] Development of High-Energy Electron Beam and Radiation Sources with 4 PW Laser Pulses Hyung Taek KIM (GIST, Korea) | (Invited) [We1D-1] DFT Analysis of The Adsorption of SinH2n+1 on Silicon Surfaces using SiH4/Ar Capacitively Coupled Plasmas for Fast and Uniform Deposition Ho Jun KIM (Hanyang Univ., Korea) | (Invited) [We1E-1] Legal Inspection of KO AC/DC Converters per the French Labor Code Inho SONG (KFE, Korea) |
| | [We1A-2] First Plasma Campaign with Newly Installed Tungsten Divertor in KSTAR Hyunsun HAN (KFE, Korea) | (Invited) [We1B-2] Development of RF Power Measurement Sensor for Plasma Process Monitoring Jongsik KIM (KFE, Korea) | (Invited) [We1C-2] Intense Narrow-band THz Emission from a Plasma Oscillator Manoj KUMAR (UNIST, Korea) | [We1D-2] The Numerical Modeling of Gas Mixtures of the Plasma Jet in Plasma Spraying Hunkwan PARK (KIMS, Korea) | (Invited) [We1E-2] ITER CODAC Status & Opportunity of Collaboration Mikyung PARK (ITER Organization, France) |
| | [We1A-3] Adapting Early-Shaping Scenario to the New W-Divertor and the Impact of Partial W-PFC on Plasma Performance Youngmu JEON (KFE, Korea) | [We1B-3] Development of Bi-modal Ion Energy Distribution Sensor Based on Voltage-Current Signal of DF-CCP Etcher Taejun PARK (Seoul Nat'I Univ., Korea) | [We1C-3] Stable Electron Beam Generation by the Laser Wakefield Acceleration using an Al3+ Plasma Sang Yun SHIN (Korea Univ., Korea) | [We1D-3] A Global Model Analysis of Thermal Equilibrium Characteristics in Inductively Coupled Argon Plasma Hwiwon SEO (Seoul Nat'I Univ., Korea) | [We1E-3] Advanced Model-based Density Control on KSTAR as Testbed for ITER Operation Eugenio SCHUSTER (Lehigh Univ., USA) |
| | [We1A-4] Achievement of 102-second High-performance Long-pulse Discharge with Lower W-shaped Tungsten Divertor in KSTAR Hyun-Seok KIM (KFE, Korea) | [We1B-4] Condition Monitoring of Plasma Enhanced Chemical Vapor Deposition Chamber with RF Frequency Scanning Method Yunsang LEE (Myongji Univ., Korea) | [We1C-4] New Segmented Capillary Gas-cell with a Down Gradient Density Profile for Laser Wakefield Acceleration Inhyuk NAM (PAL, Korea) | [We1D-4] Analysis of Electron Heating and Transport in a Hollow Cathode Capacitively Coupled RF Plasma Induced by Secondary Electron Emissions and DC Bias Heesung PARK (Pusan Nat'I Univ., Korea) | [We1E-4] Initial Flux Increase and Rated Operation Achievement Research in KSTAR Jayhyun KIM (KFE, Korea) |
| | [We1A-5] Exploring Negative-Triangularity Plasmas: Research Overview from KFE Sangil LEE (KFE, Korea) | | | | |

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| 12:00~13:30 | Lunch Break | | | | |
| 13:30~14:50 | Poster Session 1 (Olympia Hall, 1F) | | | | |
| 14:50~15:05 | Break | | | | |
| 15:05~16:25 | [We2A] AI & ML 2 Chair: Egemen KOLEMEN (Princeton Univ., USA) | [We2B] Plasma Diagnostics and Sensor Tech. 2 Chair: Kwanchul LEE (KFE, Korea) | [We2C] Plasma-Accelerator 2 Chair: Hyyong SUK (GIST, Korea) | [We2D] Plasma Source Chair: Sanghoo PARK (KAIST, Korea) | [We2E] Diagnostics Chair: MunSeong CHEON (KFE, Korea) |
| | (Invited) [We2A-1] Overview of Bayesian Plasma Diagnostic Modelling Sehyun KWAK (Max Planck Inst. for Plasma Physics, Germany) | (Invited) [We2B-1] Laser Pointing Stabilization System and Its Application to Plasma Diagnostics Ju Hahn LEE (InceraSolution Co., Ltd., Korea) | (Invited) [We2C-1] Effect of Non-Maxwellian Electrons on the Ionization of XFEL-heated Plasma Byoung-ick CHO (GIST, Korea) | (Invited) [We2D-1] Development of a Large-Area Electron Cyclotron Resonance Plasma Source Soo Ouk JANG (KFE, Korea) | (Invited) [We2E-1] Final Design of in-vessel Components in the Upper Port #18 for ITER Diagnostics Jaemin KIM (KFE, Korea) |
| | (Invited) [We2A-2] Edge Plasma Density Measurement Refinement through Bayesian Inference and Gaussian Process Methods in the KSTAR H-BES System Jaewook KIM (KFE, Korea) | [We2B-2] Electrical-Optical Plasma Diagnostics with a Transparent (ITO) Probe Beom-Jun SEO (Hanyang Univ., Korea) | (Invited) [We2C-2] Strongly Coupled Plasma State in Supercritical Fluids Gunsu YUN (POSTECH, Korea) | (Invited) [We2D-2] Progress on the Development of an FRC Device using E×B for Current-drive Kiyong LEE (KFE, Korea) | [We2E-2] Diamond Based Neutrons Diagnostics in the KSTAR D-D Plasma Campaigns Youngseok LEE (KFE, Korea) |
| | [We2A-3] Data Research Status of Data Center for Plasma Properties Mi-Young SONG (KFE, Korea) | [We2B-3] Enthalpy Probe Measurements of Thermal Plasma Jets Generated by Hollow Electrode Plasma Torch with Reverse Polarity Discharge Structure Namgi LEE (Jeonbuk Nat'l Univ., Korea) | [We2C-3] Investigation of Ionization Potential Depression for Achieving Strongly Coupled Plasmas Juho LEE (POSTECH, Korea) | [We2D-3] Conceptual Design of a Ribbon Beam Ion Source for the 6th Generation Flat Panel Display Ion Implanters Tae-Seong KIM (KAERI, Korea) | [We2E-3] Assembly Features of ITER Diagnostics Port Plugs at Port Integrator Site Maxim IVANTSIVSKIY (BINP, Russia) |
| | | [We2B-4] Investigation on Mechanism of Accelerated Tungsten Erosion Induced by Plasma Ki-Baek ROH (Seoul Nat'l Univ., Korea) | [We2C-4] Development of a Sharp Density-Gradient Plasma Target for High-Repetition-Rate Laser-Plasma Experiments Kyungmin ROH (GIST, Korea) | | [We2E-4] Remote Handling Procedure of ITER Diagnostic - Upper Vertical Neutron Camera Aleksandr TASKAEV (BINP, Russia) |
| | | | | | [We2E-5] Manufacturing and Inspection of ITER Diagnostic System Elements Dmitrii GAVRILENKO (BINP, Russia) |
| 16:25~16:40 | Break | | | | |
| 16:40~18:00 | Poster Session 2 (Olympia Hall, 1F) | | | | |

| June 27 (Thu) | | | | | | |
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| Time / Date | Room A (Seoul) | Room B (London) | Room C (Rome) | Room D (Athens) | Room E (Berlin) | |
| 09:00-10:20 | Plenary Session 11 (Olympia Hall, 1F) Evolution and Future Direction of TCAD Simulation to Overcome Challenges in Memory Device Manufacturing Dongyeon OH (SK hynix Inc., Korea) Chair: Jung-Sik YOON (KFE, Korea) | | | | | |
| | Plenary Session 12 (Olympia Hall, 1F) Plasma Sources in the Semiconductor Process: What has been used and what will be necessary Keun Hee BAI (Samsung Electronics Co. Ltd., Korea) Chair: Jung-Sik YOON (KFE, Korea) | | | | | |
| 10:20-10:40 | Break | | | | | |
| 10:40~12:00 | [Th1A] Transport 2 Chair: Jae-Min KWON (KFE, Korea) | Korean Fusion Day | | [Th1C] Laser Fusion Chair: Kitae LEE (KAERI, Korea) | [Th1D] Next Gen. Device Tech. Chair: Jongsik KIM (KFE, Korea) | [Th1E] Blanket Chair: Dong Won LEE (KAERI, Korea) |
| | (Invited) | (Invited) | | (Invited) | (Invited) | (Invited) |
| | [Th1A-1] Role of an External Torque Injection for Internal Transport Barrier Formation in a Weak Magnetic Shear Configuration Sehoon KO (KFE, Korea) | Introduction on EnF and Korea Supply Chain Changho CHOI (EnableFusion Inc., Korea) | | [Th1C-1] Laser Fusion Study at GIST Woosuk BANG (GIST, Korea) | [Th1D-1] New Plasma Science and Etching Technology for the Next Generation Memory and Logic Devices Jin Chul SON (PSK, Korea) | [Th1E-1] Neutronics Support for the Design of European DEMO Breeding Blankets and a Dedicated Nuclear Testing Facility Jin Hun PARK (Karlsruhe Inst. of Tech., Germany) |
| | (Invited) | (Invited) | | (Invited) | (Invited) | (Invited) |
| | [Th1A-2] Entropy Analysis for Fusion Kinetic Plasmas: Turbulence and Instability Jungpyo LEE (Hanyang Univ., Korea) | Introduction on Korea Fusion Programs (public side) Si-Woo YOON (KFE, Korea) | | [Th1C-2] Enhancing Collisional-Radiative Models for Laser-Driven Fusion Plasmas through Data-Driven Dimension Reduction and Kinetic Equation Modeling Min Sang CHO (Lawrence Livermore Nat'l Lab., USA) | [Th1D-2] Challenges of the HARC Etching Process, Its Chemical Reaction Modeling, and Future Prospects Song-Yun KANG (Samsung Electronics Co. Ltd., Korea) | [Th1E-2] Current Progress in the Development of the HCCP TBM Hyoseong GWON (KFE, Korea) |
| (Invited) | (Invited) | | (Invited) | (Invited) | (Invited) | |
| [Th1A-3] Two-Dimensional Reduced Model for Ohmic Plasma Start-Up in Tokamaks Min-Gu YOO (General Atomics, USA) | Introduction on UK Fusion Program Thomas ANDERSON (Tokamak Energy) | | [Th1C-3] Laser Fusion Driver Development using Coherent Beam Combination by SBS-PCM Hong Jin KONG (KAIST, Korea) | [Th1D-3] Method to Predict 6DOF Unknown Coefficients for PEALD Process using Deep-learning and 3D Feature Simulation Techniques YeongGeun YOON (KFE, Korea) | [Th1E-3] Structural Analysis of KFE's Depleted Uranium Hydride Bed Junyoung HUR (KFE, Korea) | |
| | Introduction on European Fusion Program Strategy Angel IBARRA (IFMIF-DONES, Spain) | | | [Th1D-4] Plasma-Simulation Physics Informed Neural Networks (PS-PINNs) for Global Discharge Models Minseok CHOI (POSTECH, Korea) | [Th1E-4] Hybrid (Combined with Manual and Automatic) TIG Welding for the ITER Blanket Shield Block Sa-Woong KIM (KFE, Korea) | |
| 12:00~13:30 | Lunch Break | | | | | |

PRESENTATION SCHEDULE _ ORAL

| June 27 (Thu) | | | | | |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------|-------------------------|-----------------|
| Time / Date | Room A (Seoul) | Room B (London) | Room C (Rome) | Room D (Athens) | Room E (Berlin) |
| 13:30~14:10 | Plenary Session 13 (Olympia Hall, 1F) Accelerated Development of Fusion Power Plant with High-quality Fusion Supply Chain Gyung-Su LEE (EnableFusion Inc., Korea) Chair: Angel IBARRA (IFMIF-Dones, Spain) | | | KAPRA Conference | |
| 14:10~15:30 | Fusion Special Session 1 (Olympia Hall, 1F) Panel Discussion | | | | |
| 15:30~15:45 | Break | | | | |
| 15:45~17:15 | Fusion Special Session 2 joint with KAPRA (Olympia Hall, 1F/ Korean) | Plasma E. I. Workshop | | 비핵융합세션 | |
| 17:15~18:00 | | | | | |
| 18:00~20:00 | Banquet (Sofitel Ambassador Seoul Hotel) | | | | |

| June 28 (Fri) | | | | | |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time / Date | Room A (Seoul) | Room B (London) | Room C (Rome) | Room E (Berlin) | Room F (Atlanta) |
| 09:00-10:20 | Plenary Session 14 (Olympia Hall, 1F) Plasma-based Laser Pulse Compression for Ultrahigh Peak Power Hyyong SUK (GIST, Korea) Chair: Seong Hee PARK (Korea Univ., Korea) | | | | |
| | Plenary Session 15 (Olympia Hall, 1F) International Linear Collider (ILC) Shinichiro MICHIZONO (KEK, Japan) Chair: Heung-Sik KANG (PAL, Korea) | | | | |
| 10:20-10:40 | Break | | | | |
| 10:40~12:00 | [Fr1A] Major Devices 2 Chair: Andrea GAROFALO (GA, USA) | [Fr1B] Plasma Medicine and Bioscience 1 Chair: Sooseok CHOI (Jeju Nat'l Univ., Korea) | [Fr1C] Plasma Photonics Chair: Seong Hee PARK (Korea Univ., Korea) | [Fr1E] Material Chair: Yi-Hyun PARK (KFE, Korea) | [Fr1F] Device Application Chair: Jung-Sik YOON (KFE, Korea) |
| | (Invited) [Fr1A-1] Overview of Versatile Experiment Spherical Torus (VEST): Status, Progress and Plans JongYoon PARK (Seoul Nat'l Univ., Korea) | (Invited) [Fr1B-1] Plasma Applications in Medical and Healthcare Market Youbong LIM (Plasmapp Co., Ltd, Korea) | (Invited) [Fr1C-1] Review of Plasma Optics for Compression of Ultraintense Laser Pulses Min Sup HUR (UNIST, Korea) | [Fr1E-1] Conceptual Design of the Integrated Breeding Test Facility (IBTF) Beam Dump Myungho KIM (KFE, Korea) | [Fr1F-1] Investigation of Plasma Cleaning Effects on Si Etch Rate Change Using Plasma Information (PI)-Virtual Metrology (VM) in SF ₆ /O ₂ /Ar Plasma Ingyu LEE (Seoul Nat'l Univ., Korea) |
| | [Fr1A-2] Summary of Turbulence and Transport Working Group in 2023 Campaign and Future Research Plan Kimin KIM (KFE, Korea) | (Invited) [Fr1B-2] An Appropriate Technology for Areas Where Fertilizer Supply Is Difficult: Focusing on On-Site Air-to-Fertilizer System and Agricultural Waste Management Jong-Seok SONG (KFE, Korea) | [Fr1C-2] Exploring the Dense Plasma Formation for Laser Pulse Compression Hyojeong LEE (GIST, Korea) | [Fr1E-2] Effects of Thickness Reduction Rate on Microstructure and Mechanical Properties of Hot Rolled ARAA Plate Sungyu KIM (KFE, Korea) | [Fr1F-2] Analysis of Discharge Characteristics of Capacitive Coupled Low-Pressure Plasma Source Capable of Discharge below 1 mTorr Woobeen LEE (Chungnam Nat'l Univ., Korea) |
| | [Fr1A-3] Summary of 3D Field Experiments in 2023 KSTAR Campaign Minwoo KIM (KFE, Korea) | [Fr1B-3] Ecotoxicity Removal of Human Cell Lines and Luminescent Bacteria to Metal EDTA Complex using Underwater Plasma Hee Jae LEE (KFE, Korea) | [Fr1C-3] Raman Backward Amplification with Multiple Pump Lasers Dohyun PARK (UNIST, Korea) | [Fr1E-3] Microstructure and Mechanical Properties of Advanced Reduced-activation Alloy TIG Welded Joint Joonoh MOON (Changwon Nat'l Univ., Korea) | [Fr1F-3] Data Generation Technique for Low Aspect Ratio Pattern Etch Process Recipe Development Gwanjoong KIM (Seoul Nat'l Univ., Korea) |
| | [Fr1A-4] The Design, Construction and First Operation of the SUNIST-2 Spherical Tokamak Yi TAN (Tsinghua Univ., China) | [Fr1B-4] Decomposition of Chemical and Biological Warfare Agents via Plasma-activated Water Min Woo KIM (KFE, Korea) | [Fr1C-4] Laser-Processed Low-Reflectance Aluminum Target for Overdense Plasma Suho KIM (GIST, Korea) | [Fr1E-4] Current Status of Development of Korean Reduced Activation Ferritic/Martensitic Steel for Fusion Reactor Chang-Hoon LEE (KIMS, Korea) | [Fr1F-4] Development of PR Defect Control Technology by using Plasma Ion Beam Source Byeong-Yeop CHOI (Chungnam Nat'l Univ., Korea) |
| | | | | [Fr1E-5] Mechanical Properties and Corrosion Mechanisms of ARAA Affected by Li ₂ TiO ₃ Pebbles in Helium-cooled Breeding Blanket Yunsong JUNG (KFE, Korea) | |

| Time / Date | June 28 (Fri) | | | | |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|------------------|
| | Room A (Seoul) | Room B (London) | Room C (Rome) | Room E (Berlin) | Room F (Atlanta) |
| 12:00~13:30 | Lunch Break | | | | |
| 13:30~14:50 | [Fr2A] Energetic Particle Chair: Lei QI (KFE, Korea) | [Fr2B] Plasma Medicine and Bioscience 2 Chair: Jong-Seok SONG (KFE, Korea) | | | |
| | (Invited) [Fr2A-1] Theory of Direct Fast Ion Effect on Turbulence-zonal Flow System Gyungjin CHOI (Seoul Nat'l Univ., Korea) | (Invited) [Fr2B-1] Utilizing Surface Dielectric Barrier Discharge as a Nitric Oxide Source Sanghoo PARK (KAIST, Korea) | | | |
| | [Fr2A-2] Physics of Alfvén Eigenmode Mitigation in KSTAR Experiment Sangjin PARK (Seoul Nat'l Univ., Korea) | (Invited) [Fr2B-2] Enhancing Plant Cultivation through Plasma-Activated Water: A Study on Growth Promotion and Molecular Regulation from Seedling to Harvest Ryza A. PRIATAMA (KFE, Korea) | | | |
| | [Fr2A-3] Loss of Runaway Beam and its Impact on the Electromagnetic Behavior of Plasma Disruptions Munseong CHEON (KFE, Korea) | [Fr2B-3] Evaluation of Plasma-based Nitrate Fertilization System Application and Plant Growth Geum Ran AHN (KFE, Korea) | | | |
| | [Fr2A-4] Mode Spectrum Characteristics and Analysis for ITER and Advanced Tokamak Scenarios on KSTAR Kyungjin KIM (ORNL, USA) | | | | |
| 14:50~15:05 | Break | | | | |
| 15:05~15:20 | iFPC 2024 Closing Ceremony (Olympia Hall, 1F) | | | | |