

# Program of PASW26

May 12 (Tue)-15 (Fri) 2026

Shilla Stay Haeundae, Busan, Korea

Presentation Type		
Lecture	50 minutes (45 minute talk + 5 minute Q&A)	total 10
Invited talk	25 minutes (20 minute talk + 5 minute Q&A)	total 16
Contributed talk	15 minutes (12 minute talk + 3 minute Q&A)	total 19
Poster flash talk	3 minutes	total 9

May 12, 2026 (Tue)				
Time	Schedule			
08:30-09:25	Registration			
09:25-09:30	Opening [Dongsu Ryu]			
Session 1 [Chair: Hyesung Kang]				
Time	Name	Affiliation	Present type	Title
09:30-10:20	Jiansen He	PKU, China	Lecture	Turbulence in Heliosphere
10:20-11:10	Hiroya Yamaguchi	ISAS, JAXA, Japan	Lecture	Atomic Processes in Astrophysical Plasmas with XRISM High-Resolution Spectroscopy
11:10-11:40	Coffee Break			
Session 2 [Chair: Dongsu Ryu]				
Time	Name	Affiliation	Present type	Title
11:40-12:30	Luciano Rezzolla	Goethe University Frankfurt, Germany	Lecture	Binary neutron-stars I: Bulk Dynamics and Gravitational Waves
12:30-14:00	중식			
Session 3 [Chair: Quanming Lu]				
Time	Name	Affiliation	Present type	Title
14:00-14:25	Jungyeon Cho	Chungnam National University(CNU), Korea	Invited talk	Sub-Alfvenic MHD Turbulence
14:25-14:40	Yaokun Li	Shandong University, China	Contributed talk	The First Particle-in-Cell Simulation of Three-Dimensional Strong Langmuir Turbulence
14:40-14:55	Yuri Yamashita	Nagoya University, Japan	Contributed talk	Systematic Identification of MHD Turbulence Regimes and Their Physical Properties
14:55-15:10	Ningning Guo	Xiangtan University, China	Contributed talk	Effects of Synchrotron Self-Absorption on Polarization Diagnostics of MHD Turbulence
15:10-15:35	Chuanpeng Hou	University of Potsdam, Germany	Invited talk	The Contribution of Turbulence to Solar Wind Heating in the Inner Heliosphere
15:35-16:00	Huirong Yan	Deutsches Elektronen-Synchrotron(DESY) & University of Potsdam, Germany	Invited talk	Bridging Observational and Numerical Analyses of Turbulence to Cosmic Ray Anisotropy
16:00-16:30	Coffee Break, Group Photo			
Session 4 [Chair: Jianfu Zhang]				
Time	Name	Affiliation	Present type	Title
16:30-16:45	Ziqi Liu	Xiangtan University, China	Contributed talk	Probing Spectral Properties of Magnetized ISM via Polarization Statistics
16:45-17:10	Hui Li	Los Alamos National Laboratory(LANL), USA	Invited talk	Kink-Unstable Jets: Polarization and Particle Acceleration
17:10-17:35	Ken Ohsuga	University of Tsukuba, Japan	Invited talk	Numerical Simulations of Black Hole Accretion Flows and Outflows
17:35-17:50	Ryoji Matsumoto	Chiba University, Japan	Contributed talk	Global Radiation MHD Simulations of Magnetically Supported Disks in Active Galactic Nuclei
17:50-18:05	Weibo Yang	Huazhong University of Science and Technology(HUST), China	Contributed talk	Numerical Simulations of Faraday Rotation in AGN Jet-Lobe Systems
18:05-18:30	Mengke Zhao	Nanjing University, China	Invited talk	Equation vs. AI in the Multiscale ISM: Can Deep Generative Models Internalize the Laws of Star Formation?

May 13, 2026 (Wed)				
Session 5 [Chair: Jiansen He]				
Time	Name	Affiliation	Present type	Title
09:00-09:50	Luciano Rezzolla	Goethe University Frankfurt, Germany	Lecture	Binary Neutron-Stars II: Multi-messenger Emission
09:50-10:40	Quanming Lu	University of Science and Technology of China(USTC), China	Lecture	Collisionless Magnetic Reconnection in the Magnetosphere
10:40-11:10	Coffee Break			
Session 6 [Chair: Siming Liu]				
Time	Name	Affiliation	Present type	Title
11:10-12:00	Ryo Yamazaki	Aoyama Gakuin University(AGU), Japan	Lecture	High-Power Laser Experiments of Supercritical Magnetized Collisionless Shocks
12:00-12:25	Hirofumi Noda	Tohoku University, Japan	Invited talk	High-Resolution X-ray Spectroscopy of Active Galactic Nuclei with XRISM: Probing the Vicinity of Supermassive Black Holes
12:25-14:00	Lunch			
Session 7 [Chair: Youichi Sakawa]				
Time	Name	Affiliation	Present type	Title
14:00-14:25	Masahiro Kobayashi	National Institute for Fusion Science(NIFS), Japan	Invited talk	TBD
14:25-14:50	Qingwen Wu	Huazhong University of Science and Technology(HUST), China	Invited talk	he Stellar Process in Dense Nuclear Environments: Dynamics and Multi-messenger
14:50-15:15	Kenichi Nagaoka	National Institute for Fusion Science(NIFS), Japan	Invited talk	Experimental Study on Wave-Particle Interactions in Magnetically Confined Plasmas
15:15-15:30	Krushna Chandra Barik	Asia Pacific Center for Theoretical Physics(APCTP), Korea	Contributed talk	Direct MMS Observations of Canonical Vorticity Dynamics during Magnetic Reconnection
15:30-15:45	Fa Yang	University of Science and Technology of China(USTC), China	Contributed talk	Laboratory Observations of Hall Magnetic Field in Electron-only Magnetic Reconnection with a Guide Field
15:45-16:00	Lianyan Fu	Shandong University, China	Contributed talk	Electron-Scale Reconnection as a Micro-Accelerator of Relativistic Electrons in Solar Flares
16:00-16:30	Coffee Break			
Session 8 [Chair: Hui Li]				
Time	Name	Affiliation	Present type	Title
16:30-16:45	Subham Ghosh	Asia Pacific Center for Theoretical Physics(APCTP), Korea	Contributed talk	The Conditions for the Onset of Magnetic Reconnection in an Asymmetric Current Sheet
16:45-17:00	Subhasish Bag	Asia Pacific Center for Theoretical Physics(APCTP), Korea	Contributed talk	An Asymmetric Current-Driven Magnetic Reconnection Thruster
17:00-17:30	Poster flash talks			
17:30-18:30	Discussion 1 [Led by Hui Li]			

May 14, 2026 (Thu)

Session 9 [Chair: Kenichi Nagaoka]

Time	Name	Affiliation	Present type	Title
09:00-09:50	Shuichi Matsukiyo	Kyushu University, Japan	Lecture	Kinetic Simulation Studies on Heliospheric Collisionless Shocks
09:50-10:40	Youichi Sakawa	Osaka University, Japan	Lecture	Laboratory Astrophysics Using Power-Laser Systems: Collisionless Shock and Particle Acceleration
10:40-11:10	Coffee Break			

Session 10 [Chair: Qingwen Wu]

Time	Name	Affiliation	Present type	Title
11:10-11:35	Xuening Bai	Tsinghua University, China	Invited talk	Simulating Cosmic-ray Acceleration, Transport and Feedback Across Scales
11:35-12:00	Yosuke Matsumoto	Chiba University, Japan	Invited talk	Yosuke Matsumoto - Positron accelerations in relativistic magnetized astrophysical shocks
12:00-12:15	Dongsu Ryu	Ulsan National Institute of Science and Technology(UNIST), Korea	Contributed talk	Cosmic Ray Acceleration at Shocks in High-Beta Intracluster Media
12:15-12:30	Zhoufan Mu	Shandong University, China	Contributed talk	Electron Velocity Distribution Function at Different Structures of Quasi-Perpendicular Shock
12:30-12:45	Ka Ho Yuen	Nanjing University, China	Contributed talk	First-Order Fermi Acceleration and Anomalous Scattering of Cosmic Rays in Thermally Instability Mediated Interstellar Turbulence
12:45-13:00	Zebin Zhang	Shandong University, China	Contributed talk	Exploring the Dominant Process of Solar Toroidal Magnetic Flux Loss
13:00-13:25	Sunjung Kim	Kyunghee University, Korea	Invited talk	EPIC-GOD: Energy-Conserving GPU-Accelerated PIC Simulations for Space and Astrophysical Plasmas
13:25-18:30	Lunch & Free time			
18:30-	Banquet			

May 15, 2026 (Fri)

Session 11 [Chair: MinSup Hur]

Time	Name	Affiliation	Present type	Title
09:00-09:50	Katsumi Ida	National Institute for Fusion Science(NIFS), Japan	Lecture	Development of Advanced Spectroscopic Systems for Fusion and Astrophysical Plasmas
09:50-10:40	Siming Liu	Southwest Jiaotong University(SWJTU), China	Lecture	Latest Results From LHAASO
10:40-11:10	Coffee Break			

Session 12 [Chair: Jungyeon Cho]

Time	Name	Affiliation	Present type	Title
11:10-11:25	Suresh Basnet	Asia Pacific Center for Theoretical Physics(APCTP), Korea	Contributed talk	Equation of State for Cylindrically Confined Collisionless Magnetized Plasma: Classical and Quantum Partition Function Approaches
11:25-11:40	Zhangxi Xue	Southwest Jiaotong University(SWJTU), China	Contributed talk	Understanding the Precise Measurements of Cosmic Rays by LHAASO
11:40-12:05	MinSup Hur	Ulsan National Institute of Science and Technology(UNIST), Korea	Invited talk	TBD
12:05-12:30	Inhyuk Nam	Ulsan National Institute of Science and Technology(UNIST), Korea	Invited talk	Laboratory Astrophysics Using Intense Lasers
12:30-14:00	Lunch			

Session 13 [Chair: Ryoji Matsumoto]

Time	Name	Affiliation	Present type	Title
14:00-14:25	Chulmin Kim	Institute(IBS) & Gwangju Institute of Science and Technology(GIST), Korea	Invited talk	Strong-Field Quantum Electrodynamics and Its Implications to High-Energy Astrophysics
14:25-14:40	Xi Lin	Huazhong University of Science and Technology(HUST), China	Contributed talk	A New Dynamo-Resistive GRMHD Code in the AthenaK Framework
14:40-14:55	Mingyu Ryu	Ulsan National Institute of Science and Technology(UNIST), Korea	Contributed talk	VLBI Detections of Compact Nuclei in Spiral-hosted Double-lobed Radio-loud Active Galactic Nuclei (DRAGNs): Evidence for Weak Parsec-Scale Jet Activity
14:55-16:00	Discussion 2 & Closing [Led by Ryoji Matsumoto]			

May 12(Tue) - May 14(Thu)

Poster flash talk

Name	Affiliation	Title
Youngjae Kim	Kyunghee University, Korea	Interpretable Data-Driven Solar Flare Forecasting Model
Jaeho Lee	Ulsan National Institute of Science and Technology(UNIST), Korea	Compensation of Fluctuation Using Gradient-Plasma Photonic Crystal for Laser Pulse Compression
Masato Matsuoka	Nagoya University, Japan	Experimental Observation of Stabilization Effect of Alfvén Eigenmodes due to Resonant Interaction with Energetic Ions in Magnetically Confined Toroidal Plasmas
Dohyun Park	Ulsan National Institute of Science and Technology(UNIST), Korea	TBD
Jingyu Peng	Peking University, China	Ion Stochastic Heating by Wave-Induced Field Line Curvature in Space Plasmas
Hayato Saguchi	Tohoku University, Japan	Analytical Maximum Growth Rates of the Parametric Decay Instability and Beat Instability Derived from Double-Adiabatic/CGL Equations
Jungjoon Seough	Korea Astronomy and Space Science Institute (KASI), Korea	TBD
Yuki Tamaki	Nagoya University, Japan	Fragmentation of Non-thermal Filaments in the Galactic Center Induced by Synchrotron Cooling Instability
Nan Xiang	Shandong University, China	Analysis of Magnetic Field Configuration and Full-Orbit Particle Dynamics Simulation in the NCSX Stellarator