Program

Thursday, September 24

09:25 – 09:30 Opening Remarks

Session 1 **Chair: Hyeonsik Cheong**

09:30 – 10:00 Hyobin Yoo (Sogang Univ.) Invited-K1
Atomic and electronic reconstruction at van der Waals interface in twisted 2-D materials

10:00 – 10:30 Yuya Shimazaki (ETH Zurich) Invited-J1
Strongly correlated electrons in a moiré superlattice probed with exciton spectroscopy

10:30 – 11:00 Can-Li Song (Tsinghua Univ.) Invited-C1
Fulleride superconductivity at the two-dimensional limit

11:00 – 11:15 Break

Session 2 **Chair: Hongtao Yuan**

11:15 – 11:45 Ding Zhang (Tsinghua Univ.) Invited-C2
Ising pairing in few-layer stanene and modulation of superconductivity via lithium intercalation

11:45 – 12:15 Kosuke Nagashio (Univ. of Tokyo) Invited-J2
In-plane ferroelectricity in monolayer SnS

12:15 – 13:15 Lunch

Session 3 **Chair: Yashihiro Iwasa**

13:15– 13:45 Toshiaki Enoki (Tokyo Inst. Tech.) Invited-J3
Magnetism of Nanographene-based Nanoporous Carbon and its Applications

13:45 – 14:15 Sung-Yool Choi (KAIST) Invited-K2
2D Heterojunctions for High-Performance Electronic and Optoelectronic Devices

14:15 – 14:45 Tomoki Machida (Univ. of Tokyo) Invited-J4
Quantum transport in van der Waals junctions of graphene and h-BN

14:45 – 15:15 Sang Wook Lee (Ewha Womans Univ.) Invited-K3
Fowler-Nordheim tunneling through 2D atomic layers

15:15 – 15:30 Break

Session 4 **Chair: Young-Woo Son**

15:30 – 16:00 Yi Zhang (Nanjing Univ.) Invited-C3
Controllable Growth and Electronic Structures of 2D Transition Metal Dichalcogenides Thin Films

16:00 – 16:30 Hyeon Suk Shin (UNIST) Invited-K4
Ultralow-dielectric-constant amorphous boron nitride

16:30 – 16:45 Yijun Yu (Fudan Univ.) Contributed-C1
High-temperature superconductivity in monolayer $Bi_2Sr_2CaCu_2O_{8+\delta}$

16:45 – 17:00 Suhan Son (Seoul National Univ.) Contributed-K1
Strongly adhesive dry transfer technique by polycaprolactone

17:00 – 17:15 Hideki Matsuoka (Univ. of Tokyo) Contributed-J1
Magnetic van der Waals heterostructures with Zeeman-type spin-orbit-interaction

17:15 – 17:30 Cheng Chen (Shanghaitech Univ.) Contributed-C2
Observation of topological electronic structure in a quasi-1D superconductor

17:30 – 18:30 Poster Session

Friday, September 25

Session 5 **Chair: Taishi Takenobu**

09:30 – 10:00 Katsuaki Sugawara (Tohoku Univ.) Invited-J5
The electronic state of atomic-layer TMDs studied by high-resolution ARPES

10:00 – 10:30 Joon Ik Jang (Sogang Univ.) Invited-K5
Boosting optical responses of two-dimensional semiconducting transition metal dichalcogenides

10:30 – 11:00 Qing Zhang (Peking Univ.) Invited-C4
Stimulated Emission in Solution-processed Two-dimensional Perovskite Semiconductor

11:00 – 11:15 ***Break***

Session 5 **Chair: Yi Zhang**

11:15 – 11:45 Jian Wang (Peking Univ.) Invited-C4
High-Chern-Number and High-Temperature Quantum Hall Effect without Landau Levels

11:45 – 12:15 Michihisa Yamamoto (RIKEN) Invited-J6
Electron transport in a correlated quantum Hall antiferromagnetic state of bilayer graphene

12:15 – 12:45 Yujun Deng (Fudan Univ.) Invited-C6
Quantum Anomalous Hall Effect in Few-layer $MnBi_2Te_4$

12:45 – 13:00 **Closing** **Yoshihiro Iwasa**

Posters

(17:30 – 18:30, Thursday, September 24)

Poster-C1 Cheng Chen (Peking Univ.)
Zero-energy bound states in the high-temperature superconductors at the two-dimensional limit

Poster-C2 Qiuyu Shang (Institute of Semiconductors, CAS)
Exciton−Polariton in a Continuous-Wave Optically Pumped Perovskite Laser

Poster-C3 Miao-Ling Lin (Peking Univ.)
The angle-resolved polarized Raman scattering in anisotropic layered materials

Poster-C4 Dinghui Wang (Nanjing Univ.)
Large Dynamical Axion Field in Topological Antiferromagnetic Insulator $Mn_2Bi_2Te_5$

Poster-C5 Dongjing Lin (Nanjing Univ.)
Effects of dimensionality on the charge-density-wave order in 2H transition metal dichalcogenides

Poster-C6 Xuedong Xie (Nanjing Univ.)
Band engineering in epitaxial monolayer transition metal dichalcogenides alloy $Mo_xW_{1-x}Se_2$ thin films

Poster-C7 Haolin Wang (Nanjing Univ.)
Local conduction at $BiFeO_3$-$CoFe_2O_4$ two-dimensional tubular interfaces

Poster-C8 Yichi Zhang (Peking Univ.)
A native oxide high-κ gate dielectric for 2D electronics

Poster-C9 Xuehan Zhou (Peking Univ.)
Molecular Beam Epitaxy of High-mobility 2D Oxychalcogenide Semiconductors

Poster-J1 Yoshihiro Iwasa (Univ. of Tokyo)
Vortex matter in 2D Superconductors

Poster-J2 Seiya Suzuki (NIMS)
Segregation growth of germanene at interfaces between van der Waals materials and Ag(111)

Poster-J3 Hiroki Sugawara (Tohoku Univ.)
Process development and crystal quality evaluation of van der Waals nanocapacitor using graphene/h-BN heterostructures stacked by transfer/stacking method

Poster-J4 Yan Zhang (Kyoto Univ.)
Charge Transfer and Magnetic Proximity Effect in van der Waals Heterostructure of Monolayer $MoSe_2$ and Double-layered Manganese Oxide

Poster-J5 Yuma Tanaka (Univ. of Tokyo)
Observation of the layer dependent electronic structures in atomically thin WTe2

	flakes
Poster-J6	Miuko Tanaka (Univ. of Tokyo) Electron transport mechanism in a correlated quantum Hall antiferromagnetic state of bilayer graphene
Poster-J7	Naofumi Sato (Tohoku Univ.) Controlled synthesis of graphene nanoribbons from liquid phase catalyst
Poster-J8	Tappei Kawakami (Tohoku Univ.) Electronic states of monolayer VTe_2 thin film studied by high-resolution ARPES
Poster-J9	Jiang Pu (Nagoya Univ.) Chiral electroluminescence in monolayer heterojunctions
Poster-K1	Sohwi Kim (Konkuk Univ.) Synaptic Performance with Improved Linearity and Endurance by modulating $Pb(Zr_{0.52}Ti_{0.48})O_3$/Nb doped $SrTiO_3$ Interface Barrier
Poster-K2	Yeryun Cheon (Sogang Univ.) Interlayer coupling and structural phase transition in few-layer 1T' and T_d $MoTe_2$
Poster-K3	Jinwon Lee (POSTECH) Realization of a Honeycomb-Lattice Mott Insulating State on 1*T*-TaS_2
Poster-K4	Junho Seo (CALDES, IBS & POSTECH) Tunable high-temperature itinerant antiferromagnetism in a van der Waals magnet
Poster-K5	EuiHyoun Ryu (Korea Univ.) ReS_2 based *pn* Heterojunction Device
Poster-K6	Seohyun Nam (Sogang Univ.) Population dynamics of excitons and biexcitons in a 2D halide perovskite single crystal
Poster-K7	Taewook Kim (Yonsei Univ.) 2D TMD Channel with 1D ZnO Nanowire for Nonvolatile Trap Memory
Poster-K8	Yongjae Cho (Yonsei Univ.) Low voltage operating nonvolatile memory transistor with $MoTe_2$ channel and P(VDF-TrFE) ferroelectrics
Poster-K9	Yoonseok Kim (Korea Univ.) Atomic-Layer-Confined Multiple Quantum Wells Enabled by Monolithic Bandgap Engineering of Transition Metal Dichalcogenides
Poster-K10	Hyeok Jun Jin (KAIST) Atomically thin Schottky junction with a gap-mode plasmon for Enhanced photoresponsivity in MoS_2 based photodetector
Poster-K11	Jun Ho Lee (Konkuk Univ.) High-speed residue-free transfer of two-dimensional materials using PDMS stamp and water infiltration