
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 Tomoki Machida (Univ. of Tokyo) Invited-J2
Quantum transport in van der Waals junctions of graphene and h-BN

12:15 – 13:15 Lunch

Session 3

Chair: Yoshihiro 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 Kosuke Nagashio (Univ. of Tokyo) Invited-J4
In-plane ferroelectricity in monolayer SnS

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| 14:45 – 15:15 | Sang Wook Lee (Ewha Womans Univ.) Fowler-Nordheim tunneling through 2D atomic layers | Invited-K3 |
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15:15 – 15:30 Break

Session 4

Chair: Young-Woo Son

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| 15:30 – 16:00 | Yi Zhang (Nanjing Univ.) Controllable Growth and Electronic Structures of 2D Transition Metal Dichalcogenides Thin Films | Invited-C3 |
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| 16:00 – 16:30 | Hyeon Suk Shin (UNIST) Ultralow-dielectric-constant amorphous boron nitride | Invited-K4 |
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| 16:30 – 16:45 | Yijun Yu (Fudan Univ.) High-temperature superconductivity in monolayer $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ | Contributed-C1 |
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| 16:45 – 17:00 | Suhan Son (Seoul National Univ.) Strongly adhesive dry transfer technique by polycaprolactone | Contributed-K1 |
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| 17:00 – 17:15 | Hideki Matsuoka (Univ. of Tokyo) Magnetic van der Waals heterostructures with Zeeman-type spin-orbit-interaction | Contributed-J1 |
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| 17:15 – 17:30 | Cheng Chen (Shanghaitech Univ.) Observation of topological electronic structure in a quasi-1D superconductor | Contributed-C2 |
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17:30 – 18:30 Poster Session

Friday, September 25

Session 5

Chair: Taishi Takenobu

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| 09:30 – 10:00 | Katsuaki Sugawara (Tohoku Univ.) The electronic state of atomic-layer TMDs studied by high-resolution ARPES | Invited-J5 |
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| 10:00 – 10:30 | Joon Ik Jang (Sogang Univ.) Boosting optical responses of two-dimensional semiconducting transition metal dichalcogenides | Invited-K5 |
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| 10:30 – 11:00 | Qing Zhang (Peking Univ.) Stimulated Emission in Solution-processed Two-dimensional Perovskite Semiconductor | Invited-C4 |
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11:00 – 11:15 Break

Session 5

Chair: Yi Zhang

11:15 – 11:45 Jian Wang (Peking Univ.) Invited-C5
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 (Peking Univ.)
Exciton–Polariton in a Continuous-Wave Optically Pumped Perovskite Laser
- Poster-C3 Miao-Ling Lin (Institute of Semiconductors, CAS)
The angle-resolved polarized Raman scattering in anisotropic layered materials
- Poster-C4 Dinghui Wang (Nanjing Univ.)
Large Dynamical Axion Field in Topological Antiferromagnetic Insulator $\text{Mn}_2\text{Bi}_2\text{Te}_5$
- 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 $\text{Mo}_x\text{W}_{1-x}\text{Se}_2$ thin films
- Poster-C7 Haolin Wang (Nanjing Univ.)
Local conduction at $\text{BiFeO}_3\text{-CoFe}_2\text{O}_4$ 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-C10 Haoxiong Zhang (Tsinghua Univ.)
Induced Anisotropic Superconductivity in Ionic Liquid Cation Intercalated 1T-SnSe₂
- 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 MoSe₂ and Double-layered Manganese Oxide

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| Poster-J5 | Yuma Tanaka (Univ. of Tokyo) Observation of the layer dependent electronic structures in atomically thin WTe ₂ 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 1T-TaS ₂ |
| Poster-K4 | Junho Seo (CALDES, IBS & POSTECH) Tunable high-temperature itinerant antiferromagnetism in a van der Waals magnet |
| Poster-K5 | EuiHyoung Ryu (Korea Univ.) ReS ₂ based <i>pn</i> 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 |