

The 10th International Workshop on 2D Materials

Day 1, July 5th Tuesday

Start from 8:00am @ Beijing time

9:00am @ Tokyo and Seoul time

Tencent Voov Meeting

8:05-8:10 Host: Hongtao Yuan Opening remark 5 min

1 st session		Chair: Yoshihiro Iwasa		
8:10-8:50	Invited J1	Electron microscopy and spectroscopy of 2D hybrid materials	Kazu Suenaga	Osaka University
8:50-9:30	Invited K1	Operando TEM investigation on the domain dynamics in 2D ferroelectrics	Hyobin Yoo	Sogang University
9:30-10:10	Invited C1	2D Layered MoSi₂N₄ Family	Wencai Ren	Institute of Metal Research

10:10-10:30 Group-Photo session and 20-min Break

10:30-10:50	YR-J1	High-resolution micro-ARPES studies of monolayer VS₂ grown on bilayer graphene	Tappei Kawakami	Tohoku University
10:50-11:10	YR-K1	In-situ observation of dynamic changes of the graphene by STEM	Hyunjeong Jeong	Ewha Womans University
11:10-11:30	YR-C1	Lattice fluctuation induced pseudogap in quasi-one-dimensional Ta₂NiSe₅	Cheng Chen	University of Oxford

11:30-13:00 Lunch

2 nd Session,		Chair: Zhongkai Liu		
13:00-13:40	Invited J2	Quasicrystals in twisted 2D systems	Mikito Koshino	Osaka University
13:40-14:20	Invited C2	Understanding cuprate electron correlations through 1D	Zhuoyu Chen	Southern University of Science and Technology
14:20-15:00	Invited K2	Field-tunable toroidal moment and anomalous Hall effect in noncollinear antiferromagnetic Weyl semimetal Co_{1/3}TaS₂	Je-Geun Park	Seoul National University

15:00-15:15 15-min Break

15:15-16:20	Panel discussion : Future of 2D Materials Moderator: Prof. Hyeonsik Cheong			
	Panel Talks (5min each)	Je-Geun Park (Seoul National University) Hiroki Ago (Kyushu University) Yuanbo Zhang (Fudan University)		
	Open Discussion	Future of 2D Materials		
16:20-16:30	10-min Break			
YR parallel session 1A Chair: Zhongkai Liu				
16:30-16:50	YR-J2	Tunnel coupled moiré lattice and electrically tunable Feshbach resonances in twisted bilayer semiconductors	Yuya Shimazaki	Center for Emergent Matter Science, RIKEN
16:50-17:10	YR-K2	Neuromorphic devices based on the electrochemical metallization in the ferroelectric material	Chansoo Yoon	Konkuk University
17:10-17:30	YR-C2	In-Gap States Induced by Distortion and Topology in Puckered Bismuthene	Yanfeng Lyu	Nanjing University of Posts and Telecommunications
YR parallel session 1B Chair: Cheng Chen				
16:30-16:50	YR-J3	Ohmic current injection into single-crystal <i>h</i>-BN toward electrically-driven device applications	Supawan Ngamprapawat	University of Tokyo
16:50-17:10	YR-K3	First-principles study on twist-angle-dependent phonons and band edges from whirlpool-lattice distortions in MoS₂/WSe₂ moiré heterobilayers	Eunjung Ko	Korea Institute for Advanced Study
17:10-17:30	YR-C3	Orbital-Selective High-Temperature Cooper Pairing Developed in the Two-Dimensional Limit	Chaofei Liu	Peking University

Day 2, July 6th Wednesday**Start from 8:00am @ Beijing time****9:00am @ Tokyo and Seoul time**

Tencent VooV Meeting

1 st session		Chair: Hongtao Yuan		
8:10-8:50	Invited J3	Nonlinear transport in 2D layered materials	Yoshihiro Iwasa	University of Tokyo
8:50-9:30	Invited K3	Direct photoemission from exciton insulator	Han Woong Yeom	Institute for Basic Science
9:30-10:10	Invited C3	Ultrathin high-T_c superconductors and Josephson junctions	Ding Zhang	Tsinghua University
10:10-10:30		20-min Break		
10:30-10:50	YR-J4	Signature of topological band crossing in ferromagnetic $\text{Cr}_{1/3}\text{NbSe}_2$ epitaxial thin film	Bruno, K. Saika	University of Tokyo
10:50-11:10	YR-K4	Nitrogen Doping Engineering through NH_3 Plasma Treatment for Enhancement Mode MoS_2 Thin-Film Transistors	Mingu Kang	Korea Advanced Institute of Science and Technology (KAIST)
11:10-11:30	YR-C4	Tuning the magnetic anisotropy energy of Fe_5GeTe_2	Feng Qin	Nanjing University
11:30-13:00		Lunch		
2 nd Session,		Chair: Hyeonsik Cheong		
13:00-13:40	Invited J4	Resonant tunneling through quantized subbands of few-layer WSe_2 in van der Waals tunnel junctions	Tomoki Machida	University of Tokyo
13:40-14:20	Invited K4	Interface Band Engineering Toward High-Performance 2D van der Waals Electronics	Chul-Ho Lee	Korea University
14:20-15:00	Invited C4	Engineering near-infrared light emission in mechanically exfoliated InSe crystals through hydrostatic pressure for multicolor microlasing	Qing Zhang	Peking University
15:00-15:20		20-min Break		
15:20-15:40	YR-J5	Moiré exciton dynamics in van der Waals heterostructure	Heejun Kim	Kyoto University

15:40-16:10	YR-K5	Raman study on bilayer-monolayer MoS₂/WSe₂ heterostructure	Siwon Oh	Sogang University
16:10-16:30	YR-C5	ARPES and STM study on the electronic structure of twisted bilayer WSe₂	Ding Pei	ShanghaiTech University
16:30-16:50	YR-J6	Rolling 2D sheets into 1D nanotubes by using nano-test-tubes	Yusuke Nakanishi	Tokyo Metropolitan University
16:50-17:10	YR-C6	Observation of anomalous amplitude modes in the kagome metal CsV₃Sb₅	Gan Liu	Nanjing University
17:10-17:20 Host: Hyeonsik Cheong Closing remark 10 min				

Day 3, July 7th Thursday

Extended Tutorial Session:

Start from 8:30am @Beijing time

9:30am @Tokyo and Seoul time

Student Summer School Lectures (50 + 10 min each)

Extended Tutorial Session		Chair: Hongtao Yuan		
8:30-9:30	Tutorial Lecture1	Magnetism in two-dimensional materials	Wei Ji	Renmin University of China
9:40-10:40	Tutorial Lecture2	Freestanding Perovskite Oxides – a new playground for emergent low-dimensional correlated phases and electronic applications	Yuefeng Nie	Nanjing University