

CORPES 2023 PROGRAMME
M234, Institute of Physics, Chinese Academy of Sciences, Beijing, China

Sunday, 10th of Sept. 2023

2:00 to 6:00 pm

REGISTRATION
Building M, First Floor
Institute of Physics
Chinese Academy of Sciences
Beijing, China

Invited Presentation (25 minutes talk plus 5 minutes Q&A)
Oral Presentation (15 minutes talk plus 5 minutes Q&A)

Monday, 11th of Sept. 2023

8:00 am-5:00 pm

Registration

Morning Session

Chair:

Konrad Matho

9:00-9:10 am

Opening & welcome

9:10-9:40 am

Mo-01

Sergey Borisenko

IFW-Dresden

Superconducting Arcs

9:40-10:10 am

Mo-02

Hong Ding

Shanghai Jiao Tong University

Recent Progresses on Iron-Majorana Platform

10:10-10:30 am

Mo-03

Dongjin Oh

Massachusetts Institute of Technology

Three Dimensional Flat Bands in Pyrochlore Metal CaNi₂

10:30-10:50 am

COFFEE BREAK

Chair:

Donglai Feng

10:50-11:20 am

Mo-04

Adam Kaminski

Ames National Laboratory

Electronic Properties of New Topological Quantum Materials

11:20-11:40 am

Mo-05

Yogendra Kumar

Graduate School of Advanced Science and Engineering,
Hiroshima University

Observation of Topological Surface States in Superconducting PdSeTe Single Crystal

11:40 am-2:00 pm

LUNCH

Afternoon Session

Chair:

James Freericks

2:00-2:30 pm

Mo-06

Philipp Werner

University of Fribourg

Nonequilibrium DMFT Approach to RIXS and Raman Scattering

2:30-3:00 pm

Mo-07

Stefan Blügel

Peter Grünberg Institute and Institute for Advanced Simulation

Electron-Magnon Scattering in Elementary Ferromagnets

3:00-3:20 pm

Mo-08

Lin Miao

Southeast University, China

Spin-State Excitation Induced Insulator-Metal Transition in FeSb₂

3:20-3:40 pm

Mo-09

Junyu Zong

Nanjing University

Inducing Itinerant Ferromagnetism by Manipulating Van Hove Singularity in Epitaxial Monolayer 1T-VSe₂

3:40-4:00 pm

COFFEE BREAK

Chair:

Adam Kaminski

4:00-4:30 pm

Mo-10

Evgueni Tchouklov

Donostia International Physics Center

Recent Advances in Physics and Materials Science of Magnetic Topological Insulators and Strong Spin-Orbit Coupled Materials

4:30-4:50 pm

Mo-11

Niels Schröter

Max Planck Institute of Microstructure Physics

New Spin-Momentum Locking and Strong Correlations in Chiral Semimetals

4:50-5:10 pm

Mo-12

Louat Alex

Diamond Light Source

The Pseudochiral Fermi Surface of α -Ru1₃

5:10-5:30 pm

Mo-13

Suyoung Lee

Department of Physics and Astronomy, Seoul National University

Spectroscopic Evidence for Spin Splitting in Antiferromagnetic MnTe

5:30-5:50 pm

Mo-14

Jun Fujii

CNR-IOM

Spin-Polarized Electronic States in CoTe₂

Tuesday, 12th of Sept. 2023

8:00-9:00 am

Registration

Morning Session

Chair:

Masatoshi Imada

9:00-9:30 am

Tu-01

Donglai Feng

University of Science and Technology of China

Long-Ranged Charge Order Conspired by Magnetism and Lattice in Antiferromagnetic Kagome Metal FeGe

9:30-10:00 am

Tu-02

Ryotaro Arita

Research Center for Advanced Science and Technology, University of Tokyo

First-principles Materials Design of Nickelate and Palladate Superconductors

10:00-10:20 am

Tu-03

Defa Liu

Beijing Normal University

Magnetic Weyl Semimetal in Kagome Lattice Co₃Sn₂S₂

10:20-10:40 am

COFFEE BREAK

Chair:	Hermann Dürr			
10:40-11:10 am	Tu-04	Changyoung Kim	Seoul National University	Electronic Properties of Atomically Thin Correlated Material Films
11:10-11:30 am	Tu-05	Santiago Blanco Canosa	Donostia International Physics Center	Softening of a Flat Phonon Mode in the Kagome ScV ₆ Sn ₆
11:30-11:50 am	Tu-06	Junfeng He	University of Science and Technology of China	The Role of van Hove Singularities in Kagome Metals
11:50-12:10 pm	Tu-07	Takami Tohyama	Tokyo University of Science	Spin and Charge Dynamics of Doped One-Dimensional Mott Insulators
12:10-1:30 pm	LUNCH			
Afternoon Session				
Chair:	Changyoung Kim			
1:30-2:00 pm	Tu-08	Yulin Chen	University of Oxford	Strong Inter-valley Electron-Phonon Coupling in Magic-Angle Twisted Bilayer Graphene
2:00-2:30 pm	Tu-09	Kalobaran Maiti	Tata Institute of Fundamental Research	Anomalies at the Dirac Point in Graphene
2:30-2:50 pm	Tu-10	Gianmarco Gatti	University of Geneva	Orbital and Wavevector Dependence of the Moiré Potential in a Semiconducting Heterobilayer
2:50-3:10 pm	Tu-11	Nan Xu	Wuhan University	Tailoring Dirac Fermions by In-Situ Tunable High-Order Moiré Pattern
3:10-3:30 pm	COFFEE BREAK			
Chair:	Cephise Cacho			
3:30-5:00 pm	Poster Flash			
5:00-7:00 pm	Poster Presentation			

Wednesday, 13th of Sept. 2023				
8:00 am-2:00 pm	Registration			
Morning Session				
Chair:	Takami Tohyama			
9:00-9:30 am	We-01	Wentao Zhang	Shanghai Jiao Tong University	Ultrafast Photoinduced Phase Transitions in Quantum Materials Revealed by Time- and Angle-Resolved Photoemission Spectroscopy
9:30-10:00 am	We-02	James Freericks	Georgetown University	Theoretically Describing Pump-Probe Experiments in Electron-Phonon Coupled Systems Out to PS Time Scales
10:00-10:20 am	We-03	Zhesheng Chen	Nanjing University of Science and Technology	Ultrafast Dynamics of Hot Carriers in Pristine and Electron Accumulation Layers of Indium Selenide
10:20-10:40 am	COFFEE BREAK			
Chair:	Felix Bäumberger			
10:40-11:10 am	We-04	Hermann Dürr	Uppsala University	Real-Time Observation of Phonon-Electron Energy Flow in Laser-Heated Nickel
11:10-11:30 am	We-05	Maciej Dendzik	KTH	Sub-10 meV Time-Resolved ARPES Setup Using High-Harmonic Generation
11:30-11:50 am	We-06	Shuo Dong	Institute of Physics, Chinese Academy of Sciences	Observation of Ultrafast Interfacial Meitner-Auger Energy Transfer in a Van der Waals Heterostructure
11:50 am-2:00 pm	LUNCH			
Afternoon Session				
2:00-6:00 pm	Visit SECUF and HEPS			
6:00-8:00 pm	Banquet			
8:00pm-	Back to IOP			

Thursday, 14th of Sept. 2023				
8:00-9:00 am	Registration			
Morning Session				
Chair:	Sergey Borisenko			
9:00-9:30 am	Th-01	Yang Liu	Zhejiang University	Revealing the Momentum-Dependent Heavy Quasiparticles in Ce-Based Kondo Lattice Systems
9:30-10:00 am	Th-02	A. F. Santander-Syro	Institut des Sciences Moléculaires d'Orsay, Université Paris-Saclay	Imaging the Itinerant-to-Localized Transmutation of Electrons Across the Metal-to-Insulator Transition in V₂O₃
10:00-10:20 am	Th-03	Jongho park	Seoul National University	Antiperovskite X ₃ SnC: A New Platform for Quantum Phase Transition (X = Lanthanide)

10:20-10:40 am	Th-04	Tian Qian	Institute of Physics, Chinese Academy of Sciences	Evidence for Single-Band Mott Insulator State in Nb ₂ Cl ₃ and Excitonic Insulator State in Ta ₂ Pd ₃ Te ₅
10:40-11:00 am	COFFEE BREAK			
Chair:	Evgeni Tchoukrov			
11:00-11:30 am	Th-05	Felix Baumberger	Department of Quantum Matter Physics, University of Geneva	How Quasiparticle Die in a Bad Metal
11:30-11:50 am	Th-06	Konrad Matho	Neel Institute	Analyzing ARPES Data on a Fermi Surface Crossing Path in k-Space
11:50-12:10 am	Th-07	Yun Yen	Paul Scherrer Institute	Circular Dichroism and Orbital Angular Momentum in Chiral Weyl Semimetals PdGa/PtGa
12:10-2:00 pm	LUNCH			
Afternoon Session				
Chair:	Philipp Werner			
2:00-2:30 pm	Th-08	Luca de' Medici	ESPCI Paris France	Mott Quantum Critical Points and Phase Separation at Finite Doping in Hund Metal
2:30-2:50 pm	Th-09	Jörg Fink	IFW Dresden	Scattering Rates of Quasi-Particles: From Fermi Liquids via Marginal Fermi Liquids to "Super-Planckian" Systems.
2:50-3:10 pm	Th-10	Lin Zhao	Institute of Physics, Chinese Academy of Sciences	Nodal s± Pairing Symmetry in an Iron-Based Superconductor with only Hole Pockets
3:10-3:30 pm	COFFEE BREAK			
Chair:	Kalobaran Maiti			
3:30-4:00 pm	Th-11	Masatoshi Imada	Waseda University	Ab Initio Studies, Spectroscopic Signatures, and Fractionalization in Cuprate High-Tc Superconductors
4:00-4:30pm	Th-12	Yao Wang	Emory University	Phonon-Mediated Attractive Interaction and Its Impact on Cuprate Superconductors
4:30-4:50 pm	Th-13	Xiangyu Luo	Institute of Physics, Chinese Academy of Sciences	Electronic Origin of High-Tc Maximization and Persistence in Trilayer Cuprate Superconductors
4:50-5:10 pm	Th-14	Wei Ku	Tsung-Dao Lee Institute, Shanghai Jiao Tong University	Probing a Bose Metal via Electrons: Inescapable Non-Fermi Liquid Scattering and Pseudogap Physics
5:10-5:30 pm	Th-15	Tao Li	Renmin University of China	Several Revealing ARPES Measurements that Should be Conducted on the High-Tc Cuprate Superconductors

Friday, 15 th of Sept. 2023				
8:00-9:00 am	Registration			
Morning Session				
Chair:	Andrea F. Santander-Syro			
9:00-9:30 am	Fr-01	Shuyun Zhou	Tsinghua University	Floquet Engineering of a Model Semiconductor
9:30-9:50 am	Fr-02	Zhihao Jiang	Aarhus University	Visualizing Band Hybridization and Moiré Effects in Gate-Tunable Twisted Graphene Layers Using NanoARPES
9:50-10:10 am	Fr-03	Mao Ye	Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences	Recent Progress of the High-Resolution Micro-Focused ARPES Beamline at Shang Synchrotron Radiation Facility
10:10-10:30 am	COFFEE BREAK			
Chair:	Jörg Fink			
10:30-11:00 am	Fr-04	Alessandra Lanzara	Materials Sciences Division, Lawrence Berkeley National Laboratory	Topological Excitonic States and Their Fingerprints on Electronic Structure
11:00-11:20 am	Fr-05	Will Luckin	University of Bath	Controlling Charge Density Order in 2H-TaSe ₂ Using a Van Hove Singularity
11:20-12:00 pm	Best Poster Awards & CORPES 25 & Closing			