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GENERAL INFORMATION

Venue

Rm. S101 & S102, Teaching Building,
UCAS, Zhong-Guan-Cun Campus

Add: No.3 Nanyitiao, Zhongguancun,
Haidian District, Beijing, P.R.China

Website:

<http://topocorr2017.csp.escience.cn>

A map of KITS and its neighborhood
including location of hotels can be found
at the back of this handbook

Registration

The registration desk will be opened at
the UCAS, Zhong-Guan-Cun Campus
during the following hours:

16:00-20:00, 2 July 2017

08:30-17:00, 3-21 July 2017

Presentation Preparation

Presenters must upload presentations
during coffee breaks before, preferably
one day prior to the start of their session
to ensure their presentations are loaded
successfully

Internet-Wireless

All delegates have access to the UCAS
free wireless Internet service. The user
name and password will be announced
during the conference

Catering

Morning and Afternoon Tea Breaks

Tea breaks during the forum will be
served outside Rm. S101 & S102,
Teaching Building

Welcome Banquet

18:30, (Buses departure at 18:00 from
the UCAS, Zhong-Guan-Cun Campus),
Quanjude Restaurant, 6 July.

(Invitation card required)

Nearby Cafes and Restaurants

There are numerous cafes and
restaurants near KITS. Have fun with
Chinese food and language!

PROGRAM

Note

SPT: Symmetry protected topological states
QSL: Quantum spin liquid
DQC: Deconfined quantum criticality
QSI: Quantum spin ice
ITF: Interacting topological fermion systems
SET: Symmetry enriched topological orders
TSC: Topological superconductors

WEEK 1

Jul. 3

09:30-09:45	Fu-Chun Zhang (KITS)	Welcome Speech
09:45-11:00	Xie Chen (Caltech)	Fracton topological orders
11:00-11:15	<i>Tea Break</i>	
11:15-12:30	Lukasz Fidkowski (Stony Brook Univ.)	Topological phases in driven systems and quantum information flow
12:30-14:00	<i>Lunch</i>	
14:00-15:15	Takashi Imai (McMaster Univ.)	Single crystal NMR investigation of the kagome lattice in herbertsmithite

Jul. 4

09:00-10:15	Shuo Yang (Perimeter Institute)	Lattice model constructions for gapless domain walls of topological phases
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Yizhi You (Princeton)	Fractional Berry phase effect and composite particle hole liquid in partial filled Landau level bilayers
12:15-14:00	<i>Lunch</i>	
14:00-15:15	Lu Li (Univ. of Michigan)	Rotational Symmetry Breaking in a Trigonal Superconductor Nb-doped Bi ₃ Se ₃
15:15-16:00	<i>Tea Break</i>	

Topological States and Phase Transitions in Strongly Correlated Systems
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16:00-17:15	Kazushi Kanoda (Tokyo Univ.)	Strongly correlated topological states in organics; quantum spin liquids and Weyl fermion phases
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Jul. 5 (SPT Day)

09:00-10:15	Ying Ran (Boston College)	Symmetry enforced SPT phases
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10:15-11:00 *Tea Break*

11:00-12:15	Zheng-Cheng Gu (CUHK)	Towards a complete classification of symmetry protected topological phases for interacting fermions in three dimensions and a general group supercohomology theory
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12:15-14:00 *Lunch*

16:00-17:15	Shinsei Ryu (Chicago Univ.)	Many-body topological invariants for fermionic SPT phases
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Jul. 6 (QSL Day)

09:00-10:15	Tao Xiang (IOP, CAS)	Gapless Spin-Liquid Ground State in the Kagome Heisenberg Antiferromagnet
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10:15-11:00 *Tea Break*

11:00-12:15	Tian-Heng Han (Univ. of Chicago & Argonne)	Scattering and high-field thermodynamic studies on two-dimensional frustrated antiferromagnetism
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12:15-14:00 *Lunch*

14:00-15:15	Bruce Gaulin (McMaster Univ.)	Quantum Ground States in XY Pyrochlore Magnets
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Jul. 7 (DQC Day)

09:00-10:15	Anders Sandvik (Boston Univ.)	Role of two length scales at the deconfined quantum-critical point
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10:15-11:00 *Tea Break*

11:00-12:15	Senke Xu (UC Santa Barbara)	Duality between 2+1d quantum critical points
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12:15-14:00 *Lunch*

14:00-15:15	Wen-An Guo (BNU)	Phases and phase transitions in the two-dimensional pure and disordered JQ models
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Week 2

Jul. 10 (QSL Day)

09:00-10:15	Shi-Yan Li (Fudan Univ.)	Heat transport study of spin liquid candidates
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Qing-Ming Zhang (Renmin Univ.)	Exploring quantum spin-frustrated materials
12:15-14:00	<i>Lunch</i>	
14:00-15:15	Yao Shen (Fudan Univ.)	Spinon excitations in YbMgGaO ₄
15:15-16:00	<i>Tea Break</i>	
16:00-17:15	Guang-Yu Guo (NTU)	TBA

Jul. 11 (QSI Day)

09:00-10:15	Yuan Wan (Perimeter Institute)	Spinon walk in quantum spin ice
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Shigeki Onoda (RIKEN)	Quest to U(1) quantum spin liquids, valence bond solids, novel ordered phases in pyrochlores and spinels: unconventional quasiparticles and interference effects
12:15-14:00	<i>Lunch</i>	
14:00-15:15	Owen Benton (RIKEN)	Instabilities of quantum spin ice state

Jul. 12 (QSL Day)

09:00-10:15	Hai-Dong Zhou (Tennessee Univ.)	Frustrated magnetism in layer compounds with triangular and kagome lattices
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Shi-Liang Li (IOP, CAS) & Zili Feng (IOP, CAS)	TBA

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12:15-14:00	<i>Lunch</i>	
14:00-15:15	Jia-Wei Mei (S. Univ. of Sci. and Tech.)	Identifying a Gap in Kagome Spin Liquid: First-Principles, Experiment, and Theory

Jul. 13 (ITF Day)

09:00-10:15	Akira Furusaki (RIKEN)	Breakdown of free-fermion classification of topological insulators and Superconductors
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Fakher F. Assaad (Universität Würzburg)	Lattice fermions coupled to a transverse Ising field.
12:15-14:00	<i>Lunch</i>	
14:00-15:15	Hong Yao (Tsinghua Uni.)	Fermion-induced quantum critical points and emergence of spacetime supersymmetry: renormalization-group and sign-problem-free QMC studies

Jul. 14

09:00-10:15	Chong Wang (Harvard Univ.)	A web of dualities in condensed matter physics: from quantum Hall effect to exotic quantum criticality
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Yuan-Ming Lu (Ohio State Univ.)	Measuring symmetry fractionalization in quantum spin liquids
12:15-14:00	<i>Lunch</i>	
14:00-15:15	Yin-Chen He (Harvard Uni.)	Kagome spin liquid

Week 3

Jul. 17 (SET Day)

09:00-10:15	Yang Qi (MIT)	The folding trick for topological orders enriched by the mirror symmetry
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Meng Cheng (Yale Univ.)	Anomalies in two-dimensional symmetry-enriched topological phases

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12:15-14:00	<i>Lunch</i>	
14:00-15:15	Haruki Watanabe (Univ. of Tokyo)	Complete Theory of Symmetry-based Indicators of Band Topology

Jul. 18 (QSL Day)

09:00-10:15	Zheng-Xin Liu (Renmin Univ.)	Quantum spin liquid states on Honeycomb lattice with Dirac spinons
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Jin-Sheng Wen (Nanjin Univ.)	Investigations on α -RuCl ₃ , a material proximate to the Kitaev quantum spin liquid
12:15-14:00	<i>Lunch</i>	
14:00-15:15	Gang Chen (Fudan Univ.)	Theoretical Progress in Kitaev Materials, Pyrochlore Iridates, and Quantum Spin Ice

Jul. 19 (TSC Day)

09:00-10:15	Guo-Qing Zheng (Okayama Uni.)	Quest for topological superconductivity
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Yu-Xuan Wang (UIUC)	Topological phase transitions in multi-component superconductors

Jul. 20

09:00-10:15	Adam Nahum (Oxford)	TBA
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Nic Shannon (Okinawa Inst. of Sci. and Tech.)	Frustrating quantum spin ice
12:15-14:00	<i>Lunch</i>	
14:00-15:15	Wei-Qiang Yu (Renmin Univ.)	Pressure-induced and field-induced Magnetically Disordered State of α -RuCl ₃ Evidenced by NMR

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Jul. 21

09:00-10:15	Dong-Ning Sheng (California State Univ., Northridge)	Possible Nematic Spin Liquid in Spin- \$1\$ Antiferromagnetic System on the Square Lattice: Implication for the Nematic Paramagnetic State of FeSe
10:15-11:00	<i>Tea Break</i>	
11:00-12:15	Hong-Hao Tu (Ludwig-Maximilians- University Munich)	Universal entropy of conformal critical points on a Klein bottle
12:15-14:00	<i>Lunch</i>	
14:00-15:15	Jeffery Teo (Virginia Univ.)	Between topological strings and topological phases

CONTACT LIST

Note: The contact information is provided for the convenience of attendees to collaborate and keep in touch. This information should not be shared with non-registered attendees and please respect the privacy of other attendees by not compiling this list for the purpose of sending unsolicited emails, or by sharing personal information without approval. Thank you.

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