

Program schedule

Monday, July 9 Tutorials

Morning session:

9.00 am -10:00 am **Roser Valenti**

Frustrated Magnetic Materials from an ab initio perspective

10:00 am - 10:30 am Discussions

10:30 am -11:30 am **Valentin Taufour**

How to grow a magnetic single crystal and then kill its magnetism

11:30 am - 12:00 noon Discussions

Lunch break

Afternoon session:

2.00 pm -3:00 pm **Lucile Savary**

Quantum Spin Liquids

3:00 pm - 3:30 pm Discussions

3:30 pm -4:30 pm **Eduardo da Silva Neto**

Resonant x-ray scattering(RXS) for the study of spin, charge and lattice excitations

4:30 pm - 5:00 pm Discussions

Tuesday, July 10

Morning session: Pyrochlores I

9.00 am -9.30 am: **Radu Coldea** (invited)

Quantum features in the spin dynamics of the frustrated pyrochlore $\text{Er}_2\text{Ti}_2\text{O}_7$

9.30 am -10.00 am: **Bruce Gaulin**

Short and long range ordered spin ice in the frustrated pyrochlore $\text{Tb}_2\text{Ge}_2\text{O}_7$

10.00 am -10.30 am: **Ludovic Jaubert**

Pyrochlore thin films

Coffee break

Late morning session: Pyrochlores II

11.00 am -11.30 am: **Jeffrey Rau** (invited)

Anisotropic exchange in ytterbium magnets: breathing pyrochlores, spinels and beyond

11.30 am -12.00 pm: **Claudio Castelnovo**

Dynamics of quasiparticle excitations in spin ice materials

12.00 pm -12.30 pm: **Peter Holdsworth**

Multiple monopole phase transitions in spin ice

Lunch

Afternoon session: Pyrochlores III

2.00 pm -2.30 pm: **Nic Shannon**

Frustrating quantum spin ice

2.30 pm -3.00 pm: **Kemp Plumb**

Continuum of magnetic excitations in the Heisenberg pyrochlore antiferromagnet $\text{NaCaNi}_2\text{F}_7$

3.00 pm -3.30 pm: **Owen Benton**

Disorder and its consequences in Pr-based quantum spin ice

Coffee break

Poster session I: 3.30 pm -5.00 pm

Evening session: Pyrochlores IV

5.00 pm -5.30 pm: **Romain Sibille** (invited)

Investigations on quantum effects in some rare-earth pyrochlore oxides.

5.30 pm -6.00 pm: **Shigeki Onoda**

Magnetic monopoles in quantum spin ice under an electric field

6.00 pm -6.30 pm: **Tom Fennell**

Multiple Coulomb phase in the fluoride pyrochlore CsNiCrF_6

6.30 pm -7.00 pm: **Hikaru Kawamura**

Randomness-induced quantum spin liquid behavior in the $s=1/2$ Heisenberg antiferromagnet on the pyrochlore lattice

Wednesday, July 11

Morning session: Kitaev physics I

9.00 am -9.30 am: **Johannes Knolle** (invited)

Dynamics of Kitaev spin liquids

9.30 am -10.00 am: **Gabor Halasz** (invited)

Probing Kitaev spin liquids with resonant inelastic X-ray scattering

10.00 am -10.30 am: **Liang Wu**

Antiferromagnetic resonance and terahertz continuum in α -RuCl₃

Coffee break

Late morning session: Kitaev physics II

11.00 am -11.30 am: **Arnab Banerjee** (invited)

Magnetic disorder, order and models of α -RuCl₃

11.30 am -12.00 pm: **Roser Valenti** (invited)

Field-induced phases in generalized Kitaev models and materials

12.00 pm -12.30 pm: **Hae-Young Kee**

Path to stable quantum spin liquids in spin-orbit coupled correlated materials

Lunch

Afternoon session: Kitaev physics III

2.00 pm -2.30 am: **Ioannis Rousochatzakis** (invited)

Quantum spin liquid in the semiclassical regime

2.30 pm -3.00 pm: **Yong-Baek Kim**

Theory of a quantum spin liquid in hydrogen-intercalated honeycomb iridate, H₃LiIr₂O₆

3.00 pm -3.30 pm: **Alejandro Ruiz**

Hidden ferromagnetism in the Kitaev honeycomb iridates

Coffee break

Poster session II: 3.30 pm -5.00 pm

Evening session: Kitaev physics IV

5.00 pm -5.30 am: **Frank Pollmann** (invited)

Efficient simulation of the dynamics in frustrated spin systems

5.30 pm -6.00 pm: **Masafumi Udagawa**

Vison resonance in Kitaev spin liquids

6.00 pm -6.30 pm: **Yasuhiro Shimizu**

Quantum criticality of Kitaev spin liquid

Thursday, July 12

Morning session: Kitaev physics V

9.00 am -9.30 am: **Yuji Matsuda** (invited)

Thermal Hall effect in a Kitaev spin liquid: A possible signature of Majorana chiral edge current

9.30 am -10.00 am: **Yukitoshi Motome (invited)**

Majorana signatures in Kitaev quantum spin liquids

10.00 am -10.30 am: **Minhyea Lee**

In-plane thermal conductivity study in 2D honeycomb lattice magnets

Coffee break

Late morning session: Frustrated magnets I

11.00 am -11.30 am: **Nicolas Rougemaille (invited)**

Artificial spin systems as experimental simulators of frustrated magnets: from the fragmentation of magnetization to the six vertex model

11.30 am -12.00 pm: **Federico Becca**

Dynamical structure factor of frustrated spin models: a variational Monte Carlo approach

12.00 pm -12.30 pm: **Andreas Honecker**

Quantum-Monte-Carlo approach to the thermodynamics of highly frustrated spin-1/2 antiferromagnets

12.30 pm -1.00 pm: **Didier Poilblanc**

Search for topological SU(2) chiral spin liquids using iPEPS

Lunch

Friday, July 13

Morning session: Kagome I

9.00 am -9.30 am: **Tao Xiang (invited)**

Gapless spin-liquid ground state in the spin-1/2 Kagome antiferromagnet

9.30 am -10.00 am: **Ying-Jer Kao**

A two-dimensional classical spin liquid in quantum Kagome ice.

10.00 am -10.30 am: **Sylvain Petit**

Dynamic quantum Kagome ice

Coffee break

Late morning session: Kagome II

11.00 am -11.30 am: **Bella Lake**

Exploration of the quantum spin liquid state in $\text{Ca}_{10}\text{Cr}_7\text{O}_{28}$.

11.30 am -12.00 pm: **Johannes Reuther**

A theory perspective on the spin liquid candidate material $\text{PbCuTe}_2\text{O}_6$

12.30 pm -1.00 pm: **Arnaud Ralko**

Importance of virtual singlets in RVB theory of quantum spin liquids

Lunch

Afternoon session: Frustrated magnets II

2.00 pm -2.30 am: **Collin Broholm (Invited)**

Frustrated Magnetism in Pyrochlore Fluorides

2.30 pm -3.00 pm: **Philippe Mendels**

Low- T ^{17}O NMR study of herbertsmithite crystals.

3.00 pm -3.30 pm: **Gregory MacDougall:**

Pauling entropy and deviation from the dipole ice model in a spinel spin-ice candidate

Coffee break

Poster session III: 3.30 pm -5.00 pm

Evening session: Itinerant

5.00 pm -5.30 pm: **Lucile Savary (invited)**

Singular angular magnetoresistance and spontaneous symmetry breaking in a magnetic nodal semimetal

5.30 pm -6.00 pm: **Emilia Morosan (invited)**

Exotic quantum magnets and competing states: Novel low carrier Kondo systems

6.00 pm -6.30 pm: **SungBin Lee**

Multipolar order and superconductivity in $\text{Pr(TM)}_2(\text{Al,Zn})_2\text{O}$ Kondo Materials

Saturday, July 14

Morning session: Frustrated magnets III

9.00 am -9.30 am: **Cristian Batista (invited)**

Dynamical structure factor of the triangular Heisenberg model

9.30 am -10.00 am: **Judith Romani (invited)**

Topological bands and multipolar edge states in quantum magnets.

10.00 am -10.30 am: **Alexei Tsvelik**

Chiral spin order in Kondo-Heisenberg systems

Coffee break

Late morning session: Triangular I

11.00 am -11.30 am: **Gang Chen (invited)**

Frustrated metal $\text{Pr}_2\text{Ir}_2\text{O}_7$ and spin liquid candidate YbMgGaO_4

11.30 am -12.00 pm: **Martin Mourigal (invited)**

Anomalous spin dynamics in triangular quantum magnets

12.00 pm -12.30 pm: **Sasha Chernyshev**

Topography and mimicry on a triangular lattice

Lunch

Afternoon session: Triangular II

2.00 pm -2.30 am: **Oleg Starykh**

Spinon resonance of two-dimensional $\text{U}(1)$ spin liquids with Fermi surfaces

2.30 pm -3.00 pm: **Lucy Clark**

Two-dimensional spin liquid behaviour in the triangular-honeycomb antiferromagnet, TbInO_3

3.00 pm -3.30 pm: **Hidekazu Tanaka**

Structure of magnetic excitations in a spin-1/2 triangular-lattice Heisenberg antiferromagnet $\text{Ba}_3\text{CoSb}_2\text{O}_9$

Closing of the conference:

3.30 pm -3.45 pm:

Rajiv/Wang: