

**Programme on
“Topological Phases of Quantum Matter”**

organized by

Nicholas Read (Yale U), Jakob Yngvason (U Vienna), Martin Zirnbauer (U Cologne)

Schedule of Talks: August 18 - 22, 2014:

• **Monday, August 18, 2014**

10:30 – 11:00 *Coffee/tea*

11:00 – 12:30 **Victor Gurarie**

Hall viscosity, shift, and topological invariants

12:30 – 14:00 *Lunch break*

14:00 – 15:30 **Gregory W. Moore**

Lecture 1: Quantum symmetries and the 3-fold Way

• **Tuesday, August 19, 2014**

10:30 – 11:00 *Coffee/tea*

11:00 – 12:30 **Joel E. Moore**

Abelian and non-Abelian gauge fields in the Brillouin zone for insulators and metals

12:30 – 14:00 *Lunch break*

14:00 – 15:30 **Gregory W. Moore**

Lecture 2: Phases of gapped systems and the 10-fold Way

• **Wednesday, August 20, 2014**

10:30 – 11:00 *Coffee/tea*

11:00 – 12:30 **Gregory W. Moore**

Lecture 3: Free fermions, the Altland-Zirnbauer classification, and Bott periodicity

12:30 – 14:00 *Lunch break*

14:00 – 15:30 **Nicholas Read**

Hall viscosity

• **Thursday, August 21, 2014**

10:30 – 11:00 *Coffee/tea*

11:00 – 12:30 **Gregory W. Moore**

Lecture 4: K-theory classification and application to topological band theory

12:30 – 14:00 *Lunch break*

14:00 – 15:30 **Maissam Barkeshli**

Extrinsic defects and possible new experimental probes of topological order

- **Friday, August 22, 2014**

10:30 – 11:00 *Coffee/tea*

11:00 – 12:30 **Andreas Ludwig**

Spin liquids on the Kagome lattice: chiral topological, and gapless non-Fermi liquid phase

12:30 – 14:00 *Lunch break*

14:00 – 15:30 **Petr Horava**

Multicritical symmetry breaking and resistivity of strange metals

All lectures take place at the ESI, Boltzmann Lecture Hall