

**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 25 – 29, 2014:**

• **Monday, August 25, 2014**

10:30 – 11:00 *Coffee/tea*

11:00 – 12:30 **Zheng-Cheng Gu**

*Classification of symmetry-protected topological phases in interacting fermion and boson systems*

12:30 – 14:00 *Lunch break*

14:00 – 15:30 **Jürg Fröhlich**

*The growth of cosmic magnetic fields*

• **Tuesday, August 26, 2014**

10:30 – 11:00 *Coffee/tea*

11:00 – 12:30 **Hermann Schulz-Baldes**

*Indices of Fredholm operators with symmetries*

12:30 – 14:00 *Lunch break*

14:00 – 15:30 **Abhishek Roy**

*Defects in lattice anyon models*

• **Wednesday, August 27, 2014**

10:30 – 11:00 *Coffee/tea*

11:00 – 12:30 **Duncan Haldane**

*Quantum geometry of fractional quantum Hall fluids and other topological matter*

12:30 – 14:00 *Lunch break*

14:00 – 15:30 **Jerome Dubail**

*Tensor network states and chiral states of matter*

- **Thursday, August 28, 2014**

10:30 – 11:00 *Coffee/tea*

11:00 – 12:30 **Max Lein**

*An exhaustive classification of photonic topological insulators*

12:30 – 14:00 *Lunch break*

14:00 – 15:30 **Hong-Hao Tu**

*Projected entangled-pair states for chiral topological phases*

- **Friday, August 29, 2014**

10:30 – 11:00 *Coffee/tea*

11:00 – 12:30 **Alan Carey**

*Spectral flow and operators with essential spectrum*

12:30 – 14:00 *Lunch break*

14:00 – 15:30 **Xiao-Liang Qi**

*Layer construction of 3D topological states and string braiding statistics*

**All lectures take place at the ESI, Boltzmann Lecture Hall**