



Entangled Quantum Matter and Topology

October 16-17, 2014



"Tango" A sculpture by Larry Young, located at the Wandell Sculpture Garden at Meadowbrook Park in Urbana, Illinois.

Photo by Timothy A. Bartlett.

Institute for Condensed Matter Theory
University of Illinois at Urbana Champaign

&

Perimeter Institute for Theoretical Physics
Waterloo, Ontario, Canada



NOTE: Schedule subject to change

<http://icmt.illinois.edu/Workshops/JointWorkshopPerimeter/>

<http://www.icmt.illinois.edu/>

<http://physics.illinois.edu/>

Thursday, October 16, 2014

- 9:00 am Welcome & Announcements – *190 ESB*
Eduardo Fradkin
- 9:15 am **William Witczak-Krempa** (Perimeter)
“The Dynamics of CFTs at Finite Temperature”
- 10:00 am Coffee Break – *2nd floor Commons ESB*
- 10:30 am **Shinsei Ryu** (Illinois)
“Crystalline topological phases and crosscap states in conformal field theories”
- 11:15 am **Srinivas Raghu** (Stanford)
“Quantum critical metals and their instabilities”
- 12:15 pm Lunch – *Free Time*
- 2:30 pm Coffee & Discussion – *2nd floor Commons ESB*
- 3:30 pm **Gil Young Cho** (Illinois)
“Universal Geometric Response of Abelian and Non-abelian Fractional Quantum Hall fluids”
- 4:15 pm Coffee Break – *2nd floor Commons ESB*
- 5:00 pm **Kai Sun** (University of Michigan)
“A discretized Chern-Simons gauge theory on arbitrary graphs”
- 6:00 pm **Peng Ye** (Perimeter)
“Symmetry-protected topological phases: projective construction and field theory”
- 7:00 pm Dinner (by invitation) – *Timpone’s*

Friday, October 17, 2014

- 9:00 am **Bryan Clark** (Illinois)
“Many-Body Localization in the language of Matrix Product States”
- 10:00 am Coffee Break – *2nd floor Commons ESB*
- 10:30 am **Luiz Santos** (Perimeter)
“Anomaly effects in lattice models: edge states of symmetry-protected states”
- 11:15 am Lunch and Discussion – *Free Time*
- 1:00 pm **Catherine Pepin** (CEA-Saclay,UFRN)
“Charge order and Pseudo Gap in cuprate superconductors”
- 2:00 pm Coffee Break – *2nd floor Commons ESB*