

Massachusetts Institute of Technology
Department of Physics

Condensed Matter Theory Seminar

"Experimental search for novel topological phases in correlated electron systems."

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Abstract: Various topologically nontrivial phases have been found in non-interactive electron systems, such as topological insulators and Dirac semimetals. On the other hand, the hunt for such phases in correlated electron systems has been vigorously made so far. Interesting predictions that have been theoretically proposed include the Weyl semimetal phase in the iridium pyrochlore systems, and the anomalous Hall conductors. In my talk, I will discuss the recent advance in our experimental search for such phases in pyrochlore iridates, and chiral magnets. If time permits, I will also touch on the quantum spin ice state on the pyrochlore lattice.

4:00 PM
Monday, April 25, 2016
Duboc Room (4-331)