

Massachusetts Institute of Technology
Department of Physics

Condensed Matter Theory Seminar

"Symmetry-protected topological edge modes surviving quantum criticality"

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Abstract: More than 30 years ago, the spin-1 Heisenberg chain was realized to host edge modes protected by spin rotation symmetry and the Haldane gap---the first instance of a symmetry-protected topological phase. We show that the same model continues to surprise: tuning to criticality, a piece of the edge mode remains exponentially localized. It is clarified how this is a general phenomenon which can be stabilized by symmetry, related to a topological twist of a symmetry-enriched conformal field theory.

12:00pm noon
Friday, November 2, 2018
Duboc Room (4-331)

Host: Max Metlitski