



ICTS

INTERNATIONAL
CENTRE *for*
THEORETICAL
SCIENCES

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Statistical Physics and Condensed Matter Seminar

Title : Superconductivity from Quantum Spin Liquids

Speaker : Prof. Subir Sachdev of Harvard University

Date : Wednesday, 22 July 2026

Time : 11:30 AM (IST)

Abstract : Extensive theoretical and numerical work has established the nature of quantum spin liquids on the square and triangular lattices. The parent spin liquid has fermionic spinons with a massless Dirac spectrum, which are coupled to SU(2) and U(1) gauge fields respectively. I describe the theory of the onset of superconductivity, and intertwined charge orders, from these spin liquids. On the square lattice, the theory connects to STM observations in the cuprates.

On the triangular lattice, the theory connects to recent pump-probe THz spectroscopy experiments on a kappa-ET organic insulator.

Venue : Emmy Noether Seminar Room

Zoom Meeting: <https://icts-res-in.zoom.us/j/96627832267?pwd=D1bJM89xKzTmAcE14WpRfBvFAvAOGd.1>

Meeting ID: 966 2783 2267

Passcode: 212122