

Condensed Matter Theory Center Seminar



Tuesday, December 13
11:00 am – 12:00 pm
2205 John S. Toll Physics Building

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“SYK models, strange metals, and black holes”

Abstract: The Sachdev-Ye-Kitaev (SYK) models provide solvable realizations of diffusive metallic states without quasiparticle excitations. Explicit holographic duals of the SYK models can be constructed, in terms of black holes with a near-horizon AdS₂ geometry. I will also compare the SYK models with more realistic models of the strange metals in the cuprates. A common thread connecting these models is the remarkable connection between many-body quantum chaos and diffusive thermal transport in states of quantum matter without quasiparticle excitations.

Host: Xiao Li & Ching-Kai Chiu

Web: <http://www.physics.umd.edu/cmtc/seminars.html>

