

Abstract Submitted  
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**Thermoelectric transport in SYK and holographic models of disordered non-Fermi liquids** WENBO FU, RICHARD DAVISON, Department of Physics, Harvard University, YINGFEI GU, Department of Physics, Stanford University, JENSEN KRISTAN, Department of Physics and Astronomy, San Francisco State University, SUBIR SACHDEV, Department of Physics, Harvard University — We describe charged Sachdev-Ye-Kitaev (SYK) models, which contain complex fermions with  $q/2$ -body, Gaussian-random, all-to-all interactions. A low-energy effective action is derived: it is described by a re-parameterization field, representing energy fluctuations, and a phase field, representing charge fluctuations. We compute thermoelectric transport properties, and show that they match perfectly with holographic results obtained from black holes with AdS2 horizons and momentum dissipation.

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