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Numerical study on a random 4-fermion interaction model of a strange metal WENBO FU, SUBIR SACHDEV, Department of Physics, Harvard University — We use exact diagonalization (ED) method to study the infinite range random 4 fermion model [1] of a strange metal. We examine the Greens function and show that ED result is in agreement with the large N result in the scaling limit [2]. We also examine the thermal entropy; this has an increasing trend as we increase the system size in the low temperature regime, and is consistent with large N high temperature expansion in the high temperature regime. [1] S. Sachdev, arXiv:1506.05111 [2] S. Sachdev and J. Ye, Phys. Rev. Lett. 70, 3339 (1993)

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