Abstract Submitted for the MAR17 Meeting of The American Physical Society

SYK model on the surface of 3d TI DMITRY PIKULIN, Microsoft Corp, MARCEL FRANZ, University of British Columbia — I will present the study of Sachdev-Ye-Kitaev (SYK) model as realized on the surface of three-dimensional topological insulator. I will discuss the possible paths to realizations of the model in a vortex lattice or Corbino disk geometry. I will comment on the randomness in 2-Majorana and 4-Majorana versions of the model, and the crossover between the two limiting case. I will finish with discussing measurable signatures of the model.

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