Abstract Submitted for the MAR17 Meeting of The American Physical Society

Constructively determining the MBL spectrum using Tensor Networks BRYAN CLARK, XIONGJIE YU, University of Illinois at Urbana Champaign, DAVID PEKKER, University of Pittsburgh — All the eigenstates of a manybody localized phase can be compactly represented in the tensor-network language. Current algorithms to find these states often only target single states and/or require difficult optimization to find. In this talk we will show how to generate every eigenstate in the spectrum constructively and discuss its implication for the properties of the MBL phase.

> Bryan Clark University of Illinois at Urbana Champaign

Date submitted: 11 Nov 2016

Electronic form version 1.4