Abstract Submitted for the MAR14 Meeting of The American Physical Society

Matrix Product States for Chiral Topological Phases B. AN-DREI BERNEVIG, Princeton University, BENOIT ESTIENNE, Jussieu University, NICOLAS REGNAULT, ENS Paris, YANGLE WU, Princeton University — I show how, using interacting conformal field theory, an MPS representation can be obtained for both the ground-state and the quasihole excitations of chiral topological states of matter. I show that the advance allows for the accurate calculation of quantities such as topological entanglement entropy and non-abelian braiding.

> B. Andrei Bernevig Princeton University

Date submitted: 15 Nov 2013

Electronic form version 1.4