

Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Majorana Gun: An On-Demand Single-Majorana Fermion Source JIMMY HUTASOIT, BRIAN TARASINSKI, DENIS CHEVALLIER, SHUO MI, CARLO BEENAKKER, Lorentz Institute, Leiden University — We propose a device for the Majorana fermion analog of the single-photon gun. This on-demand single-Majorana fermion source can be thought of as a generalization of the scheme proposed by Keeling *et. al.* [Phys. Rev. Lett. **101**, 196404 (2008)] to a particle-hole symmetric system. In particular, for a linear voltage sweep, we show that one can obtain a single Majorana fermion regardless of the sweep velocity.

Jimmy Hutasoit
Lorentz Institute, Leiden University

Date submitted: 14 Nov 2014

Electronic form version 1.4