

Abstract Submitted  
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**Probing Bound States in p-wave Superconductors using Shot Noise** C.J. BOLECH, Rice University, EUGENE DEMLER, Harvard University  
— The zero-energy bound states at the edges or vortex cores of chiral p-wave superconductors are expected to behave like Majorana fermions. We introduce a model Hamiltonian that describes the tunnelling process when electrons are injected into such states. Using a non-equilibrium green function formalism, we find exact analytic expressions for the tunnelling current and noise and identify experimental signatures of the Majorana nature of the bound states to be found in the shot noise. We discuss the results in the context of different candidate materials that are believed to support triplet superconductivity.

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