

Abstract Submitted
for the MAR16 Meeting of
The American Physical Society

Odd-frequency Superconductivity in Driven Systems CHRISTOPHER TRIOLA, Nordita, ALEXANDER BALATSKY, IMS, Los Alamos National Lab and Center for Quantum Materials, Nordita — We show that Berezinskiis classification of the symmetries of Cooper pair amplitudes in terms of parity under transformations that invert spin, space, time, and orbital degrees of freedom holds for driven systems even in the absence of translation invariance. We then discuss the conditions under which pair amplitudes which are odd in frequency can emerge in driven systems. Considering a model Hamiltonian for a superconductor coupled to an external driving potential, we investigate the influence of the drive on the anomalous Greens function, density of states, and spectral function. We find that the anomalous Greens function develops odd in frequency component in the presence of an external drive. Furthermore we investigate how these odd-frequency terms are related to satellite features in the density of states and spectral function. Supported by US DOE BES E 304.

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Date submitted: 08 Nov 2015

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