

Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

The Casimir effect across a superconducting transition¹
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Maryland-College Park — We show that Casimir effect can be used as a means
to probe electronic correlations. In particular, we consider an interacting electron
system which undergoes a superconducting transition and calculate the Casimir force
it exerts on a normal metal. We found an interesting non-analytic behavior of the
Casimir force as a function of temperature across the superconducting transition.

¹This research is supported by DOE-BES (DESC0001911) and the Simons
Foundation.

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Date submitted: 15 Nov 2013

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