

Abstract Submitted
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Numerical study of the stability of half-quantum vortices in superconducting Sr_2RuO_4 ¹ KEVIN ROBERTS, RAFFI BUDAKIAN, MICHAEL STONE, University of Illinois at Urbana-Champaign — We numerically solve the coupled Landau-Ginzburg-Maxwell equations for a model of a $p_x + ip_y$ superconductor in which whole or half-quanta of flux threads through a hole. We recover the pattern of stable and unstable regions for the half-flux observed in the experiments of Jang et al [1].

[1] J. Jang, et al, Observation of half-height magnetization steps in Sr_2RuO_4 , *Science*, **331**, 186-188(2011)

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