Abstract Submitted for the MAR08 Meeting of The American Physical Society

Hall Conductivity in a Spin-Triplet Superconductor WONKEE

KIM, Texas Center for Superconductivity, F. MARSIGLIO, University of Alberta, C. S. TING, Texas Center for Superconductivity — We calculate the Hall conductivity for a spin-triplet superconductor, using a generalized pairing symmetry dependent on an arbitrary phase, ϕ . A promising candidate for such an order parameter is Sr_2RuO_4 , whose superconducting order parameter symmetry is still subject to investigation. The value of this phase can be determined through Kerr rotation and DC Hall conductivity measurements. Our calculations impose significant constraints on ϕ .

Wonkee Kim

Date submitted: 27 Nov 2007 Electronic form version 1.4