

Abstract Submitted  
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**NMR relaxation rate in the FeAs superconductors** MEERA PARISH, Princeton University, JIANGPING HU, Purdue University, B. ANDREI BERNEVIG, Princeton University — We consider how different symmetries of the superconducting order parameter will affect the NMR spin relaxation rate in the newly discovered iron-based superconductors. We particularly focus on a nodeless order parameter of unconventional extended s-wave symmetry, which changes sign between the electron and hole Fermi surfaces. Using a two-band model, we show that the extended s-wave order parameter is consistent with the results of recent NMR measurements, which exhibit a characteristic  $T^3$  dependence of the NMR spin relaxation rate, only if the inter-band contribution dominates the response.

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