

Abstract Submitted
for the MAR12 Meeting of
The American Physical Society

Nuclear Magnetic Resonance Study of the Paramagnetic State of URu₂Si₂ KENT SHIRER, ADAM DIOGUARDI, JOHN CROCKER, ABIGAIL SHOCKLEY, NICHOLAS APROBERTS-WARREN, PETER KLAVINS, NICHOLAS CURRO, UC Davis — URu₂Si₂ is a heavy fermion system that has challenged researchers for many years due to its transition into a hidden order (HO) state at 17.5K. We present new nuclear magnetic resonance (NMR) data in the paramagnetic phase near the HO phase transition. An analysis of the spin-lattice relaxation rate indicates a suppression of the spin fluctuations above the HO phase transition extending up to approximately 30 K. We analyze this data in the context of several different models for the spin lattice relaxation.

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Date submitted: 07 Dec 2011

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