

Abstract Submitted  
for the MAR05 Meeting of  
The American Physical Society

**NMR/NQR and disorder effects in URu<sub>2</sub>Si<sub>2</sub>**<sup>1</sup> O.O. BERNAL, M.E. MOROZ, Physics Department, California State University, Los Angeles CA 90032, K. ISHIDA, H. MURAKAWA, Graduate School of Science, Kyoto University, Kyoto, Japan, A.P. REYES, P.L. KUHNS, National High Magnetic Field Lab, Tallahassee, Florida, D.E. MACLAUGHLIN, University of California, Riverside, California, H.G. LUKEFARH, Whittier College, Whittier, California, J.A. MYDOSH, Max Planck Institute for Chemical Physics of Solids, Dresden, Germany, T.J. GORTENMULDER, Kamerlingh Onnes Lab, Leiden University, The Netherlands, H. AMITSUKA, Department of Physics, Hokkaido University, Sapporo, Japan — NMR experiments at ambient pressure in URu<sub>2</sub>Si<sub>2</sub> demonstrate a linewidth enhancement effect at the hidden order transition temperature ( $T_0$ ). We find that larger amounts of sample disorder appear to induce larger linewidth enhancement at  $T_0$ . We will present recent NMR and NQR experiments in oriented powder and single crystal samples of URu<sub>2</sub>Si<sub>2</sub> and discuss the measurements with emphasis on a possible connection between linewidth/disorder effects and hidden order. Both NQR and NMR spectra as functions of temperature and NMR for different magnetic field strengths and orientations will be reported.

<sup>1</sup>Work supported by NSF/DMR-0203524

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Date submitted: 03 Dec 2004

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