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Bulk Nuclear Magnetic Resonance of Topological Insulators D.M. NISSON, A.P. DIOGUARDI, J. CROCKER, P. KLAVINS, N.J. CURRO, Dept. of Physics, UC Davis, N. J. CURRO NMR TEAM — Topological insulators are materials that are insulating in the bulk but remain conducting on the surface. We present ²⁰⁹Bi nuclear magnetic resonance (NMR) spectra and relaxation rate data on single crystals of Bi₂Se₃ and Bi₂Te₂Se. Our preliminary data reveal significant differences in the local electric field gradient between these two materials, and indicate a large anisotropy in the spin- lattice and spin-spin relaxation rates.

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