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Arsenic nuclear magnetic resonance in CaFe2As2 ADAM DIO-GUARDI, NICHOLAS APROBERTS-WARREN, ABIGAIL SHOCKLEY, PETER KLAVINS, NICHOLAS CURRO, UC Davis — We present $^{75}\mathrm{As}$ nuclear magnetic resonance measurements in the paramagnetic and antiferromagnetic states of CaFe2As2. Single crystals were produced using a Sn flux method and characterized via powder X-Ray diffraction, susceptibility, and specific heat measurements. The NMR data show that the internal hyperfine field and the electric field gradient change discontinuously at $T_0=169~\mathrm{K}$. The observed hyperfine field is consistent with stripe antiferromagnetic ordering of the Fe spins in the a-b plane. Spin lattice relaxation data show metallic $T_1^{-1} \sim T$ for $T \leq T_0/3$. However, T_1^{-1} shows a small peak at 10 K attributed to slow spin fluctuations that could indicate the emergence of antiferromagnetic domain wall motion.

Adam Dioguardi UC Davis

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