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### **Nematicity and Spin Fluctuations in the Iron Pnictide Superconductors Studied by NMR**

NICHOLAS CURRO, UC Davis

The iron pnictide superconductors exhibit rich phase diagrams with both nematic and magnetic ordering as well as unconventional superconductivity. These phases can be probed by As-75 NMR, which is sensitive to both magnetic and quadrupolar degrees of freedom. We show that the spin-lattice relaxation rate probes both the dynamical electron spin susceptibility as well as the dynamical nematic susceptibility in the  $\text{Ba}(\text{Fe,Co})_2\text{As}_2$  and  $\text{BaFe}_2(\text{As,P})_2$  system. A ubiquitous feature of the NMR in the doped systems, however, is the presence of glassy relaxation. We show that this behavior is connected to the large nematic susceptibility in these materials, and the presence of quenched random order. We further present new data on detwinned crystals under uniaxial strain, which uncovers the intrinsic anisotropy of the spin fluctuations in the nematic phase.