

^{75}As NMR in Fe pnictide superconductors

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Discovery of superconductivity in Fe pnictides has caused a revival of interest in superconductors. A variety of studies are on to investigate the similarities and differences with phase diagram of high-T_c cuprates. An interesting series of samples is in the Ba(Fe, Ru)₂As₂ system. The Ru end-member is a non-superconducting conventional metal while the Fe end-member is magnetically ordered below about 140 K. A superconducting “dome” exists at intermediate compositions as for the high-T_c cuprates. We are carrying out ^{75}As NMR measurements on samples with various Ru contents in the above system. We will report our results of the variation with temperature and composition of the NMR shift and the spin-lattice relaxation rate $1/T_1$ in the Ba(Fe, Ru)₂As₂ system.