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^{75}As and ^{59}Co NMR studies of $SrCo_2As_2$[1] YUJI FURUKAWA, Ames Laboratory, Dept. of Phys. and Astro, Iowa State Univ., VASILY OGLOBLICHEV, Institute of Metal Physics, Ural Div. of Russian Academy of Sci., Ekaterinburg, Russia, ABHISEK PANDEY, DAVID C. JOHNSTON, Ames Laboratory, Dept. of Phys. and Astro, Iowa State Univ. — After the discovery of unconventional superconductivity in Fe pnictides with the $ThCr_2Si_2$-type structure, much attention has been paid to the related materials AM_2As_2(A = Ca, Sr, and Ba, and M = Co, Ni, Mn, and Cu). We have been studying the electronic and magnetic properties of these related materials systematically. Among them, metallic $SrCo_2As_2$ is an interesting system [1] because inelastic neutron scattering measurements indicate strong stripe-type antiferromagnetic correlations [2], similar to the Fe pnictide superconductors. In order to investigate the magnetic and electronic properties of $SrCo_2As_2$ from a microscopic point of view, we carried out ^{59}Co and ^{75}As NMR in the temperature range T = 1.3 – 300 K. In this talk, based on ^{59}Co NMR data including ^{75}As NMR results published previously [1], we discuss the characteristic magnetic fluctuations in the system and compare them with those measured from NMR data for another cobalt arsenide $BaCo_2As_2$.

[1] A. Pandey, et al., Phys. Rev. B 88, 014526 (2013).
[2] W. Jayasekara, et al., Phys. Rev. Lett. 111, 157001 (2013).

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