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The ARIADNE axion NMR experiment ANDREW GERACI, Univ of Nevada - Reno, ARIADNE COLLABORATION — The Axion Resonant Inter-Action Detection Experiment (ARIADNE) is a collaborative effort to search for short-range spin-dependent couplings between nuclei resulting from the QCD axion, using a technique based on nuclear magnetic resonance. The aim is to detect monopole-dipole interactions between the spin of 3He nuclei and a rotating unpolarized tungsten attractor. I will discuss the basic principle of the experiment and the current experimental status, as well as several of the anticipated technical challenges involved in these types of measurements.

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