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The Axion Resonant InterAction Detection Experiment (ARIADNE)

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The Axion Resonant InterAction Detection Experiment (ARIADNE) will search for evidence of the QCD axion using nuclear magnetic resonance to search for a short-range spin-dependent interaction in the sub-millimeter range, which results from the Axion. ARIADNE features spin polarized 3He interacting with a rotating unpolarized tungsten mass as a probe for this interaction. We will outline the concept of the measurement and describe the status of the R&D progress to date.

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