Abstract Submitted
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Mississippi State University Axion Search[1] AMY RAY, DIPANGKAR DUTTA, MIKHAIL GAERLAN, PRAJWAL MOHANMMURTHY, MITRA SHABESTARI, ROBERTSEN RIEHLE, Mississippi State University, MASS COLLABORATION — The Mississippi State Axion Search is a project that is searching for a dark matter candidate, an axion- like particle. A technique known as the "light shining through a wall" is used to search for this particle via the mechanism that two incident photons couple to form an axion which passes through a wall and then decays back into photons on the other side where they are recorded by a detector. The setup of this experiment consists of two vacuum cavities, one containing a strong EM field and the other housing detectors. The project is currently being set up and will soon be ready to record data. We will present an overview of the project, construction and characterization of the integrator electronics, and data acquisition (DAQ) based on National Instrument Lab View.

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