

Abstract Submitted
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Dipole Magnets for Axion Research¹ NICHOLAS FOWLER, DIPANGKAR DUTTA, ROB RIEHLE, PRAJWAL MOHAMMURTHY, Mississippi State University Department of Physics and Astronomy, MASS COLLABORATION — Axions are hypothetical particles which have been proposed by Peccei and Quinn as a solution to the strong CP problem. The Mississippi State Axion Search (MASS) project has involved the light shining through a wall (LSW) technique to test for the existence of axions particles. The setup involves two tuned vacuum cavities, one with a radio source and one with a radio detector. The two cavities are separated by a lead wall and placed in a very strong magnetic field. At the moment, we are still in the construction phase but we are very close to beginning experimentation. My contribution to the research has mainly involved the construction of the magnet.

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