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**Construction Status of the Madison Plasma Dynamo Experiment**

JOHN WALLACE, MIKE CLARK, CAMI COLLINS, NOAM KATZ, DAVE WEISBERG, CARY FOREST, U. of Wisconsin — Construction of the Madison Plasma Dynamo Experiment (MPDX) is partially complete. This facility will be utilized to create large, un-magnetized, fast flowing, hot plasma for investigating magnetic field self-generation and flow driven MHD instabilities. A 3 meter diameter spherical vacuum chamber lined with a series of high strength samarium cobalt magnets will provide plasma confinement. The plasma will be stirred from the magnetized edge using electrodes to produce  $J \times B$  flows. Plasma sources will include lanthanum hexaboride cathodes and electron cyclotron heating. This poster will describe the current status of the design and construction of the facility including laboratory infrastructure, cast aluminum vacuum chamber, magnets, stirring electrodes, sources and diagnostics. Construction is being funded by the NSF Major Research Instrumentation program.

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