Abstract Submitted
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Status of the Wisconsin Plasma Astrophysics Laboratory[1] JOHN WALLACE, MATTHEW BROOKHART, MIKE CLARK, CHRIS COOPER, KEN FLANAGAN, IVAN KHALZOV, JASON MILHONE, ETHAN PETERSON, JOSEPH OLSON, AARON STEMO, DAVE WEISBERG, JAN EGEDAL, CARY FOREST, University of Wisconsin - Madison, MPDX TEAM — The Wisconsin Plasma Astrophysics Laboratory (WiPAL) is a facility that now encompasses a collection of novel plasma astrophysics experimental configurations. In the MPDX configuration large, un-magnetized, fast flowing, hot plasma is being used to investigate a variety of flow driven MHD instabilities. The experiment is 3 meters in diameter and utilizes a permanent magnet multicusp plasma confinement. Five 20KW, 2.45 GHz, CW magnetrons produce electron cyclotron heating for plasma generation. Ten lanthanum hexaboride (LaB6) stirring rods and molybdenum anodes are inserted into the vessel to produce JxB flows. The chamber has a variety of multiuse ports, and is able to split open to allow experimental apparatus to be inserted. This poster will describe future experimental configurations including reconnection (TREX), jet and plasma wind experiments.

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