Abstract Submitted
for the DPP12 Meeting of
The American Physical Society

Progress in the design of a drift-optimized torsatron device[1] F. BUNT, A.S. WARE, University of Montana — Progress on the design of a drift-optimized torsatron configuration is presented. Previous work developed two (unoptimized) coil torsatron coil sets - including vertical and solenoidal field coils for flexibility. Here, we present the results of optimizing these configurations for improved neoclassical confinement. The goal of this project is to design a drift-optimized torsatron device in order to blend the benefits of a natural divertor region provide by the torsatron coils with improved neoclassical confinement from drift-optimization. Equilibrium, transport and stability characteristics will be compared across the optimized configurations.

[1]Work supported by U.S. Department of Energy under Grant DE-FG02-03ER54699 at the University of Montana.

Andrew Ware
University of Montana

Date submitted: 20 Jul 2012 Electronic form version 1.4