Abstract Submitted
for the DPP11 Meeting of
The American Physical Society

QH-mode in Low Rotation, ITER-Similar Plasmas Using Static Non-axisymmetric Magnetic Fields[1] A.M. GAROFALO, K.H. BURRELL, General Atomics, J.-K. PARK, W.M. SOLOMON, PPPL, M.E. FENSTERMACHER, M.J. LANCTOT, LLNL — DIII-D experiments have shown that static 3D magnetic fields can be used to maintain the edge rotation shear required for ELM-stable operation in QH-mode even with zero-net torque from neutral beam injection (NBI). These results have been obtained in ITER-similar shape plasmas with ITER-level collisionality, normalized beta, and confinement quality. New experiments are planned to extend the previous results to conditions closer yet to those of ITER: 3D field application using coils external to the vessel, small co-I_p NBI torque, and low $q_{95} \sim 3$. Results will be discussed.

[1]Work supported by US DOE under DE-FC02-04ER54698, DE-AC02-09CH11466, and DE-AC52-07NA27344.

Andrea Garofalo
General Atomics

Date submitted: 15 Jul 2011 Electronic form version 1.4