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Sorting Category: 5.6.2 (Experimental/Observation)

Current Profile Evolution in High Performance Discharges in DIII-D¹ R.J. JAYAKUMAR, T.A. CASPER, S.L. ALLEN, M.A. MAKOWSKI, Lawrence Livermore National Laboratory, M.R. WADE, Oak Ridge National Laboratory, T.C. LUCE, P.A. POLITZER, General Atomics — Measured and computed current profile evolution are compared to determine a range of performance characteristic of high performance plasmas being investigated for Advanced Tokamak applications. The current profiles are being measured using a 36 channel motional Stark effect (MSE) diagnostics and computed kinetic profiles are obtained using ONETWO/CORSICA analyses. The paper will present the evolution and magnitude of bootstrap current and its influence on the q profile, q profiles associated with specific magnetohydrodynamic (MHD) activity and the effect, in turn, of MHD activity on the evolution of q profile.

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Prefer Oral Session Refer Poster Session	M.A. Mahdavi mahdavi@fusion.gat.com General Atomics
Special instructions: Poster 13, Stability, MHD, Current Drive, Advanced Tokamak	

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