Abstract Submitted
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Gyrokinetic simulations at finite beta[1] WILLIAM NEVINS, LLNL, JEFF CANDY, GA, YANG CHEN, University of Colorado, WILLIAM DORLAND, University of Maryland, DARIN ERNST, MIT, FRANK JENKO, IPP Garching, GREG HAMMETT, PPPL, SCOTT PARKER, University of Colorado, RON WALTZ, GA, ERIC WANG, UCLA — Understanding anomalous transport in plasmas at pressures approaching the ideal MHD balloon limit is of great importance to projections of ITER operations. Past efforts to simulate plasma microturbulence as beta is increased toward the ideal limit have met with mixed success.[2] We investigate this problem by comparing results from the GYRO, GS2, GEM, and GENE codes over a sequence of runs in which beta is increased toward the ideal ballooning limit. We will also comment on finite-beta effects to trapped electron modes.

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[2]see, e.g., J. Candy et al, Phys. Plasmas **12**, 072307 (2005), and references therein.

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