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Gyrokinetic Particle Simulation of FInite Beta Microturbulence in Tokamak Plasmas<sup>1</sup> IHOR HOLOD, University of California Irvine — Recent progress in gyrokinetic simulations of plasma microturbulence using GTC code is reported. Verification of the fluid-kinetic hybrid electron model is done by running simulations at different values of  $\beta_e$  using Cyclone base case parameters. Finitebeta stabilization, and transition from ITG to CTEM and later to the KBM mode is observed. The cross-code benchmark of real frequency and growth rate is done demonstrating good agreement.

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