

Abstract Submitted
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Simulation of turbulence in tokamak plasmas with reversed magnetic shear WENJUN DENG, ZHIHONG LIN, University of California, Irvine — Electrostatic ITG and TEM turbulence in tokamak plasmas with reversed shear and integer q minimum value are simulated using Gyrokinetic Toroidal Code (GTC). For the ITG case, electrostatic potential fluctuation gaps are observed in the minimum- q region in the linear phase, with sizes comparable to the distances between adjacent rational surfaces. In the non-linear phase, the gaps are filled up due to turbulence spreading. For the TEM case, the mode grows only in the positive-shear side in the linear phase. In the non-linear phase, it diffuses into the negative-shear side.

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