

The Study of Effects of Resonant Magnetic Perturbations in BOUT Edge Turbulence Simulations

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Plasma turbulence is generally believed to control the edge region of tokamak. The BOUT code implements a detailed model of edge turbulence based on the collisional plasma fluid equations, and many of BOUT results are in a reasonable agreement with experimental observations. The present study is focused on inclusion of external magnetic perturbation in the model. Application to the Resonant Magnetic Perturbations experiments in DIII-D will be considered.