

Abstract Submitted
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Web Interface Connecting Gyrokinetic Turbulence Simulations with Tokamak Fusion Data¹ A. SUAREZ, Rensselaer Polytechnic Institute, D.R. ERNST, Massachusetts Institute of Technology — We are developing a comprehensive interface to connect plasma microturbulence simulation codes with experimental data in the U.S. and abroad. This website automates the preparation and launch of gyrokinetic simulations utilizing plasma profile and magnetic equilibrium data. The functionality of existing standalone interfaces, such as GS2_PREP [D. R. Ernst et al., Phys. Plasmas 11(5) 2637 (2004)], in use for several years for the GS2 code [W. Dorland et al., Phys. Rev. Lett. 85(26) 5579 (2000)], will be extended to other codes, including GYRO [J. Candy & R.E. Waltz, J. Comput. Phys.186, (2003) 545]. Data is read from mdsplus and TRANSP [<http://w3.pppl.gov/transp>] and can be viewed using a java plotter, Webgraph, developed for this project by previous students Geoffrey Catto and Bo Feng. User sessions are tracked and saved to allow users to access their previous simulations, which can be used as templates for future work.

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