

Abstract Submitted
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Diagnostics for Turbulence in Plasma¹ SAMANTHA PEREIRA, Cornell University, JAMES JUNO, AMMAR HAKIM, Princeton Plasma Physics Laboratory — Turbulence is a complex phenomenon which characterizes certain fluid flows. Developing tools to extract statistics from turbulence is an integral part of understanding this phenomenon. To model turbulence, two- and three-dimensional fluid and kinetic simulations are performed using the Gkeyll code. This project focuses on creating general tools to understand the impact of various parameters on turbulence spectra, detecting and characterizing intermittent structures such as blobs and current sheets, and minimizing resolution requirements to extract a given structure and scale in a plasma.

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