Defining Validation Metrics for Non-linear Resistive MHD Simulations of the MST RFP

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Motivation and Outline

Recent advances in computer hardware enable the simulation of plasma physics and fusion reactor models at unprecedented complexity and for longer time scales. New and improved models of the ion and electron behavior and transport have been developed and are being implemented into codes which can represent the full complexity of the plasma. Such simulations offer the opportunity to test the new models and to learn what we can estimate about the plasma from the simulation.

Validation...