

Synchronizing simulations of turbulence to data

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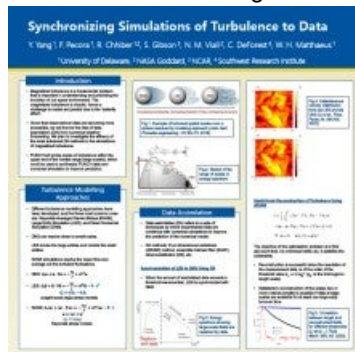
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Poster

Magnetized turbulence is a fundamental problem that is important in understanding and predicting the evolution of our space environment. The magnetized turbulence is chaotic, hence a challenge to model and predict due to the 'butterfly effect'. Given that observational data are becoming more accessible, we will borrow the idea of data assimilation (DA) from numerical weather forecasting to attack this problem. We will investigate the efficacy of the most advanced DA methods in the simulations of magnetized turbulence. DA will be used to improve Large Eddy Simulations (LES) of turbulence.



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