

Abstract Submitted  
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**Imbalanced Magnetohydrodynamic Turbulence: Numerics and Theory**<sup>1</sup> JEAN C. PEREZ, STANISLAV BOLDYREV, University of Wisconsin-Madison — Recent results from theory and numerical simulations suggest that magnetohydrodynamic turbulence develops regions of imbalanced cascades, even when no overall imbalance is imposed. Imbalanced magnetohydrodynamic turbulence is believed to be present in the solar wind, where magnetic and velocity fluctuations are dominated by Alfvén waves moving outward from the sun. We present results of high resolution numerical simulations of balanced and imbalanced turbulent cascades, obtain turbulent spectra, and propose an analytic explanation of the results.

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