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Spectra and structure of MHD turbulence¹ S. BOLDYREV, J.C. PEREZ, University of Wisconsin, Madison, J. MASON, F. CATTANEO, University of Chicago — We present recent results on magnetohydrodynamic (MHD) turbulent cascades. We concentrate on the physical processes that determine the structure of MHD turbulence in the regimes of weak and strong turbulence, and discuss the corresponding turbulent spectra. The results are compared with numerical simulations and geophysical (solar wind) and astrophysical (interstellar scintillation) observations.

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