

Abstract Submitted
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Energy Transfer Mechanisms in Weakly Collisional Plasma Turbulence TAK CHU LI, GREGORY HOWES, University of Iowa — We present a general picture of possible energy transfer mechanisms between particles and turbulent fields in weakly collisional plasmas. These mechanisms are the crucial steps leading to the dissipation of turbulence energy into plasma heat. We elucidate their significance as a function of spatial and velocity space. We also highlight ongoing effort with gyrokinetic simulations that support this picture. A range of plasma beta values suitable for space and astrophysical systems are considered in which one mechanism can play a more dominant role over another. Preliminary results will be discussed.

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