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Properties of Magnetic Plasma Turbulence at Small Scales STANISLAV BOLDYREV, QIAN XIA, VLADIMIR ZHDANKIN, JEAN CARLOS PEREZ, University of Wisconsin-Madison — Solar wind observations show that the Alfvenic energy cascade continues to and beyond the scales where the one-fluid magnetohydrodynamic description breaks down. We analyze the properties of small-scale Alfvenic turbulence in the presence of a strong background magnetic field, to understand the physics governing the transition from large-scale hydromagnetic to small-scale kinetic turbulence. The physical interpretation of subproton plasma turbulence is proposed.

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