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Turbulence Spreading through Shear Flow Layer T.S. HAHM, W. WANG, G. REWOLDT, Princeton Univ., P.H. DIAMOND, O. GURCAN, U.C. San Diego, Z. LIN, U.C. Irvine — A recent study of turbulence spreading [1] has shown that a significant level of turbulence can penetrate from the linearly unstable region to the region dominated by self-generated zonal flows. In this work, we study turbulence spreading through a mean ExB shear layer using both simple analytic model and nonlinear gyrokinetic particle (GTC) simulations.

[1] T.S. Hahm, P.H. Diamond, Z. Lin et al., On the dynamics of edge-core coupling, To appear in Phys. Plasmas (2005).

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