

## Nonlinear dissipation of the imbalanced Alfvénic turbulence

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Nonlinear evolution of Alfvénic turbulence is a fundamental process in the solar wind magnetohydrodynamic (MHD) turbulence. The past observational studies suggested that the MHD turbulence close to the sun is the "slab" fluctuation, where the wave number vector is parallel to the ambient magnetic field, while the "2D" fluctuation, where the wave number vector is perpendicular to the ambient magnetic field, becomes dominant with increasing heliocentric distance. However, the energy transfer process from the "slab" fluctuation to the "2D" fluctuation is still unclear. In the present study, we numerically discuss the nonlinear evolution of the "imbalanced (high cross helicity)" Alfvénic turbulence by using a two-dimensional ion hybrid code. The dissipation processes related to the ion kinetics are demonstrated.

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