Abstract Details

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Title: (NL1.SP19)Complexity and Bimodal Intermittent Turbulence in Space Plasmas

Abstract:

The physics of complexity and the phenomenon of strong turbulence space plasmas form the central theme of this presentation. It is demonstrated that the interactions among the coherent structures in plasmas are the origin of complexity. The resulting turbulent fluctuati shown to be generally bimodal, anisotropic and intermittent. Probabil distribution functions and local intermittency measures in terms of th wavelet transforms are obtained to demonstrate the basic characteris such type of turbulent fluctuations. The concept of magnetic reconfig (vis-�-vis magnetic reconnection) is introduced. The phenomenon of approximate scale invariance is then described from the point of view topological phase transitions.

Presentation Mode: Oral

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