

# **Large Scale Flows and Coherent Structure Phenomena in Flute Turbulence**

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The properties of zonal and streamer flows in the flute mode turbulence are analytically investigated. The stability criteria and the characteristic oscillation frequency of these large-scale anisotropic flows are determined in terms of the spectra of the turbulent fluctuations. It is also shown that the non—linear growth of these flows can lead to the formation of long--lived coherent structures which can be characterized as regions with a reduced level of anomalous transport.

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