

Abstract Submitted
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Lagrangian measurements in driven two-dimensional turbulence.

MICHAEL RIVERA, Los Alamos National Laboratory, ROBERT ECKE — Measurements obtained from driven turbulence produced in a stratified layer are reported. The turbulence produced in this apparatus is quasi-two-dimensional and is dominated by the existence of “coherent structures”. In this talk, we consider the mixing and transport of scalars within such a coherent structure dominated turbulent flow. Particular emphasis is given to understanding the effect that coherent structures have on the transport of energy and anstrophy, both from scale to scale as well as from point to point.

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