

Abstract Submitted  
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**Lagrangian Coherent Structures and the Onset of Jet Stream in Magnetized Plasma Driven by Drift Waves**<sup>1</sup> IBERE CALDAS, RAFAEL SUIGH, University of Sao Paulo — We investigate the transport of particles on the edge of a magnetically confined plasma with a resonant and a perturbing drift wave. Chaotic transport appears in the phase space and the transport can be anomalous or diffusive and is driven by Lagrangian Coherent Structures (LCSs). To show the observed relationship between the observed transport and LCSs, we present maps of Poincarè, finite-time Lyapunov exponent diagrams. For a specific combination of parameters a jet stream appear and the transport of the chaotic region becomes asymmetric, in contrast to the symmetrical transport observed when there are no jet streams.

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