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Electro-coflow as a means to study whipping instabilities in electrified liquid jets JOSEFA GUERRERO MILLAN, Georgia Institute of Technology, VENKAT GUNDABALA, Indian Institute of Technology (IIT) Bombay, ALBERTO FERNANDEZ-NIEVES, Georgia Institute of Technology — Whipping is a non-axisymmetric instability that appears in electrified jets. In air, it usually manifests in a chaotic fashion preventing its detailed experimental characterization. We use electro-coflow to generate a steady-state whipping structure and quantify its wave-like properties, which we understand from simple force balances.

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