Abstract Submitted
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Emission modes in electrically-assisted coflow[1] A.J. HIJANO, Universidad de Malaga and Georgia Institute of Technology, J. GUERRERO, A. FERNANDEZ-NIEVES, Georgia Institute of Technology, I.G. LOSCERTALES, Universidad de Malaga — We use glass-based microfluidic devices to study the emission regimes in electro-coflow. In addition to cone-jet and whipping, which are also seen in air or in the presence of a quiescent liquid bath, we also observe other regimes that where not observed before. One of these consists of a bent jet that remains confined to a plane that moves in time either periodically or aperiodically. We explore the effects of the inner and outer-fluid flow rates, their viscosity contrast and the applied voltage.

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