**The coalescence, recoil, and breakup of conical drops: exploring how geometry sets the self-similar dynamics around topological singularities**.

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In the presence of an electric field, pairs of liquid drops can be rapidly drawn together such that, at contact, the deformed interface resembles a double-cone. Following contact, these drop pairs are observed to either coalesce or recoil depending on the sharpness of the conical drops. A similar conical structure develops when a drop contacts a charged solid surface or alternatively when a satellite drop separates from a liquid jet. In all these cases, the absence of a characteristic lengthscale for the cone manifests itself through an inertia-capillary self-similarity. This talk combines experiments and simulations to better understand how subtle changes in the geometry can modify the self-similar dynamics between coalesce, recoil and repeated break-up events.