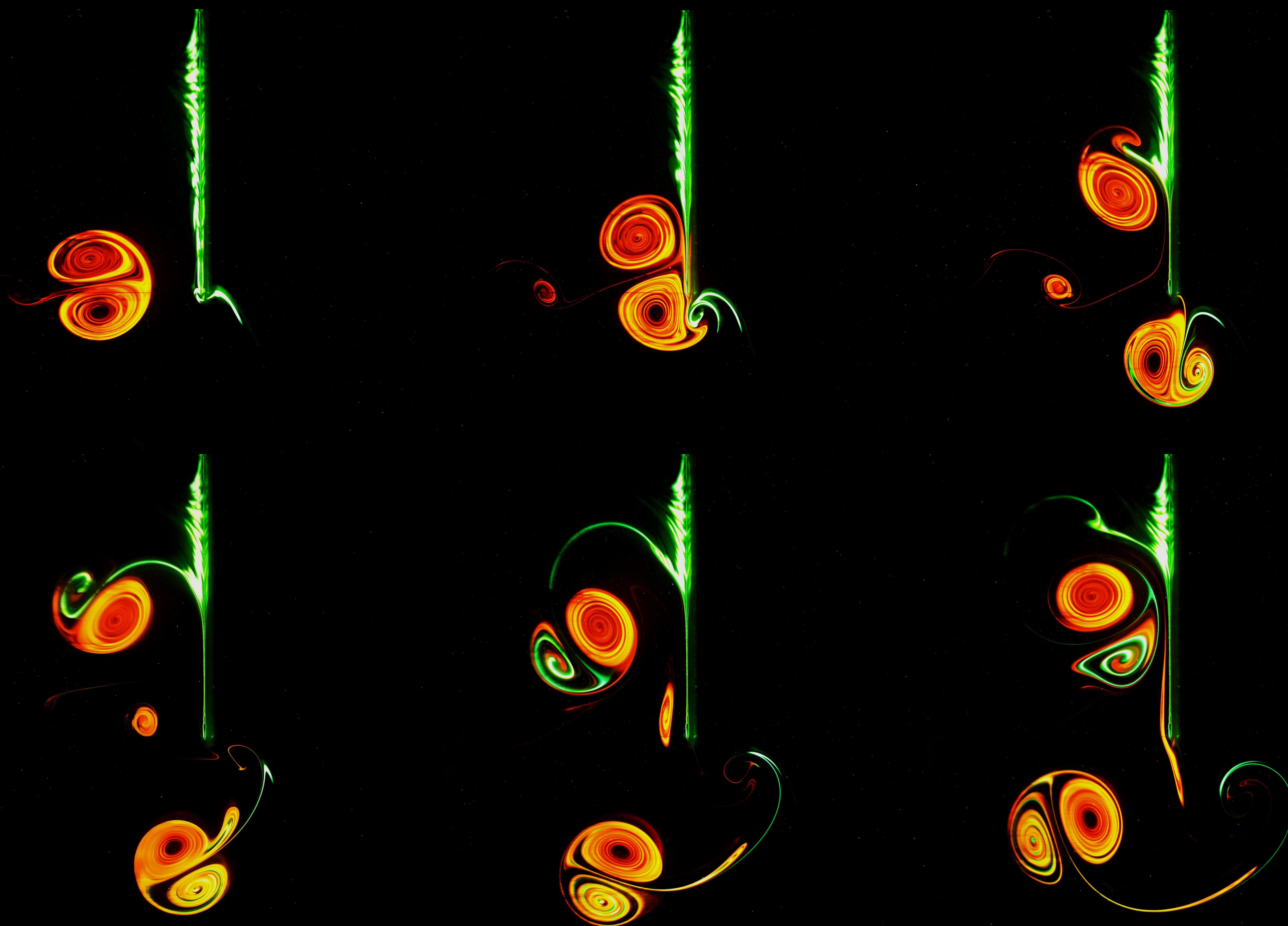


# Vortex Dipole Impacting a Semi-Infinite Rigid Plate

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This experiment visualizes the impact of a vortex dipole with the tip of a rigid plate in a quasi-two-dimensional environment. The experiment is conducted in shallow, density-stratified salt water, and a laser is used to illuminate a horizontal sheet of the fluid. Fluorescent dye is used to visualize the vortex dipole (orange) and fluid in the vicinity of the plate (green). Upon impact, two secondary dipoles form from the interaction of the original dipole with fluid near the plate. Both secondary dipoles have circular trajectories and return for subsequent impacts with the plate.