

Crystal Formation

Six Uniform Dots

2D Vortex Crystal Formation. In this work we used advanced fully Lagrangian methods to study the 2D Vortex dynamics of 6 strong vortex blobs in the presence of a weak background patch of vorticity, all with the same sign. In the upper row of the figure, the blue and green contours represent the uniform background vorticity (different colors for visualization), the red contours are 4 times as strong as the background patch. The lower row shows spatial averaged vorticity. The images illustrate entrainment of the exterior region and are in VERY good agreement with experimental data **Durkin and Fajans** (2000), “Experimental Dynamics of a Vortex within a Vortex”, **PRL**, 85, pp 4052-4055

