

# Movie Captions

- Movie 1: Left multimedia view: the time evolution of the vorticity distribution for  $Re = 10^4$ . Right multimedia view: the corresponding palinstrophy distribution density.
- Movie 2: Left multimedia view: the time evolution of the vorticity distribution for  $Re = 10^4$ . The black curve is the central curve  $\mathcal{C}$ . The red and black dots denote the singularities location. Right multimedia view: the path of the singularities of the vorticity computed on the central curve.