Flight times for Stokes and potential flows past symmetric bodies

ASHWIN VAIDYA, ROBERTO CAMASSA, RICHARD MCLAUGHLIN, NICK MOORE, University of North Carolina — We consider, by a combination of asymptotic, computational, and experimental techniques, the flight time for passive fluid particles flowing past fixed obstacles under the assumptions of potential, stokes, and slightly inertial flow. We observe some intriguing differences between the three cases.