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RESEARCH ARTICLE

Supplementary Material

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1. Cylinder Trajectories

Figure S1 shows examples of cylinder free end trajectories. Notably, streamwise displacement values are an order of magnitude larger than spanwise displacements at all points in time, and streamwise displacements have a non-zero mean.

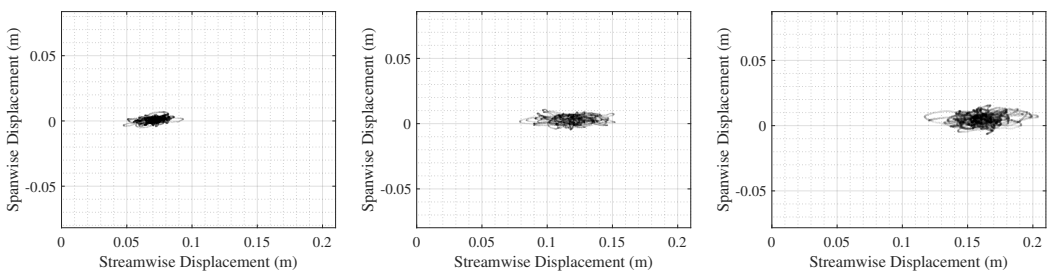

Figure S1. *Example trajectories for the free end of a cylinder (PVC tube, D = 3.8 ± 0.1 cm). Each point corresponds the position of the cylinder free end at one instant in time subject to flow speeds U = 4.5 ± 0.5 ms^{-1} (left), U = 5.6 ± 0.5 ms^{-1} (center), and U = 6.6 ± 0.5 ms^{-1} (right) over the 60 s steady state period for each speed. Note that while the data was collected at 240 Hz, the data shown here have been down-sampled to 80 Hz to reduce overlapping points. All axes are identically scaled.*

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