

Abstract Submitted
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Flow manipulation via the effects of shape geometry and topology¹ TEJASWIN PARTHASARATHY, YASHRAJ BHOSALE, FAN KIAT CHAN, MATTIA GAZZOLA, University of Illinois, Urbana-Champaign — We demonstrate the importance of body curvature effects in achieving controlled flow manipulation in streaming settings. Here, we focus on microfluidic applications for inertial particle transport and mixing. We then challenge our understanding to explain prior experimental observations in two-dimensional flows. We further extend our exploration to three-dimensional flows where strategies related to body topology become accessible.

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