

Abstract Submitted
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Jet vectoring through nozzle asymmetry¹ CHRIS ROH, California Institute of Technology, ALEXANDROS ROSAKIS, Brown University, MORTEZA GHARIB, California Institute of Technology — Previously, we explored the functionality of a tri-leaflet anal valve of a dragonfly larva. We saw that the dragonfly larva is capable of controlling the three leaflets independently to asymmetrically open the nozzle. Such control resulted in vectoring of the jet in various directions. To further understand the effect of asymmetric nozzle orifice, we tested jet flow through circular asymmetric nozzles. We report the relationship between nozzle asymmetry and redirecting of the jet at various Reynolds numbers.

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Chris Roh
California Institute of Technology

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