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Experimental sensitivity analysis of a hydrodynamically self-excited low-density axisymmetric jet LARRY LI, MATTHEW JUNIPER, University of Cambridge — We report preliminary findings from an experiment on the passive control of a hydrodynamically self-excited low-density axisymmetric jet. The control element that we use is a thin axisymmetric ring. We position this ring at different locations around the jet wavemaker and measure the response with a hot wire. We present our findings via sensitivity maps of the global frequency and the limit-cycle amplitude, and compare these to predictions from linear global instability analysis.

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