

Okinawa Institute of Science and Technology,
Graduate University,
Onna, Okinawa 904-0495, Japan

February 23, 2026

Editorial Office,
Journal of Fluid Mechanics

Dear Editor,

The current manuscript titled, “A model for limit-cycle switching in open cavity flow”, presents original research on the mathematical modeling of successive bifurcations that occur in the open cavity flow. The modeling, based on center manifold theory, results in a reduced representation of a parameteric double Hopf bifurcation and, the analysis of the model through its nullclines throws light on the mechanism of exchange of stabilities of limit-cycles, as well as the emergence of the quasi-periodic edge-states between the two limit cycles. The work significantly advances the modeling and analysis of successive bifurcations in fluid flows.

Best Regards

Prabal S. Negi