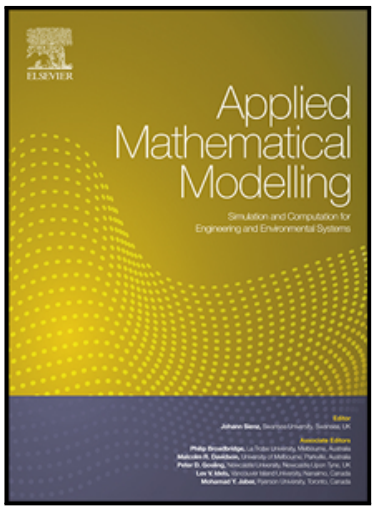

Numerical study of the transition to chaos of a buoyant plume from a two-dimensional open cavity heated from below

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Highlights

- Transition of the plume from the open cavity from steady to chaotic state is studied.
- Dynamics of the plume from the open cavity for each state is discussed
- Dependence of heat and mass transfer of the plume on Rayleigh number is quantified.