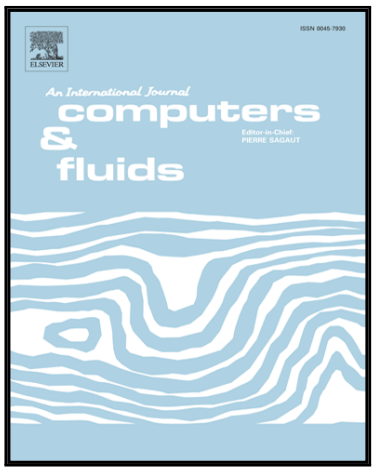

A piecewise linear contour to avoid critical points in inviscid flow stability analyses

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Highlights

- In stability analyses, neutral and stable modes can be difficult to compute
- Complex paths that avoid critical points are often used to solve this problem
- A complex piecewise linear detour is investigated for a Chebyshev spectral method
- A multi-domain technique is used to cope with the contour lack of smoothness
- Example: a stable surface mode in a channel with acoustic liner is computed