Accepted Manuscript

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

David Marx

 PII:
 S0045-7930(18)30349-9

 DOI:
 10.1016/j.compfluid.2018.06.018

 Reference:
 CAF 3935

To appear in:

Computers and Fluids

Received date:28 July 2017Revised date:20 June 2018Accepted date:27 June 2018

Please cite this article as: David Marx, A piecewise linear contour to avoid critical points in inviscid flow stability analyses, *Computers and Fluids* (2018), doi: 10.1016/j.compfluid.2018.06.018

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

0

- 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

Download English Version:

https://daneshyari.com/en/article/7155757

Download Persian Version:

https://daneshyari.com/article/7155757

Daneshyari.com