

Accepted Manuscript

Elastic imperfect tip-loaded cantilever cylinders of varying length

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PII: S0020-7403(18)30042-0
DOI: [10.1016/j.ijmecsci.2018.02.027](https://doi.org/10.1016/j.ijmecsci.2018.02.027)
Reference: MS 4187



To appear in: *International Journal of Mechanical Sciences*

Received date: 4 January 2018
Revised date: 9 February 2018
Accepted date: 10 February 2018

Please cite this article as: Jie Wang , Adam J. Sadowski , Elastic imperfect tip-loaded cantilever cylinders of varying length, *International Journal of Mechanical Sciences* (2018), doi: [10.1016/j.ijmecsci.2018.02.027](https://doi.org/10.1016/j.ijmecsci.2018.02.027)

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Highlights

- Exploration of the nonlinear mechanics of cylinders under global transverse shear
- Rigorous computational exploration of elastic instabilities in cantilever cylinders
- A rich range of qualitative length domains revealed, even under linear conditions
- Complex and length-dependent imperfection sensitivity relationship is revealed
- Closed-form algebraic characterisation offered for entire range of behaviours

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