Accepted Manuscript

Relationship between Euler buckling and unstable equilibria of buckled beams

Mihaela Nistor, Richard Wiebe, Ilinca Stanciulescu

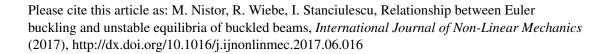
PII: S0020-7462(17)30456-0

DOI: http://dx.doi.org/10.1016/j.ijnonlinmec.2017.06.016

Reference: NLM 2871

To appear in: International Journal of Non-Linear Mechanics

Received date: 7 August 2016 Revised date: 21 June 2017 Accepted date: 21 June 2017



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.



Relationship between Euler buckling and unstable equilibria of buckled beams

Highlights

- Introduce relationship between Euler buckling under axial loading and snap-through buckling under transverse loading.
- Connect Euler buckling with the force-displacement curve under transverse loading.
- Develop metric to determine number of unstable static equilibria of a buckled structure based only on its geometry with no need to static or dynamic solvers.

Download English Version:

https://daneshyari.com/en/article/5016498

Download Persian Version:

https://daneshyari.com/article/5016498

<u>Daneshyari.com</u>