



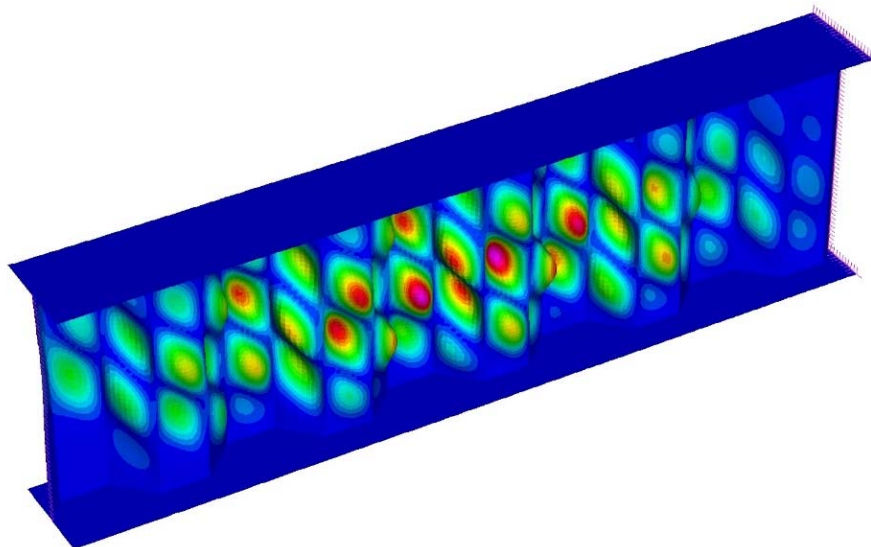
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Research Interests

Beams with corrugated webs.
Buckling of cylindrical shells.
Flexural-torsional buckling of arches.
Lateral buckling of beams and columns.
Thin-walled and cold-formed steel structures.
Behaviour and design of purlin-sheeting systems.



Local shear buckling of beam with corrugated web

Publications

Journal papers

JP Papangelis and NS Trahair, "Finite Element Analysis of Arch Lateral Buckling," *Civil Engineering Transactions*, Institution of Engineers, Australia, Vol CE29, No 1, 1987, pp 34-39 (This paper was awarded the 1987 RW Chapman Medal for the best structural Engineering paper published by the Institution).

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CTK Lai, CM Martin, GJ Hancock, JP Papangelis and NS Trahair, "An Expert System for Beam Lateral Buckling Design," *Structural Engineering Review*, Vol 5, No 2, 1993, pp 145-155.

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K Aggarwal, S Wu and JP Papangelis, Finite Element Analysis of Local Shear Buckling in Corrugated Web Beams, *Engineering Structures*, Accepted for publication 2018.

NS Trahair and JP Papangelis, Lateral Distortional Buckling of Beams with Hollow Flanges and Folded Plate Webs, *Engineering Structures*, Accepted for publication 2018.

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