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Selected Publications:

P.B. Gonçalves and R.C. Batista, “Non-linear vibration analysis of fluid-filled cylindrical shells”, *Journal of Sound and Vibration*, Vol. 127, No.1, November 1988, pp. 133-143, doi:10.1016/0022-460X(88)90354-9

Paulo B. Gonçalves and Zenón J.G.N. Del Prado, “Nonlinear Oscillations and Stability of Parametrically Excited Cylindrical Shells”, *Meccanica*, Vol. 37, No. 6, 2002, pp. 569-597, doi: 10.1023/A:1020972109600

P.B. Gonçalves and Z.G. del Prado, “Effect of non-linear modal interaction on the dynamic instability of axially excited cylindrical shells”, *Computers & Structures*, Vol. 82, Nos. 31-32, December 2004, pp. 2621-2634, Special Issue: Nonlinear Dynamics of Continuous Systems, doi:10.1016/j.compstruc.2004.04.020

Paulo Gonçalves and Zenón del Prado (Civil Engineering Department, Catholic University, PUC-Rio, 22453-900, Rio de Janeiro, Brazil), “The Non-Linear Dynamics of Thin Walled Shell Structures”, *IUTAM Symposium on Chaotic Dynamics and Control of Systems and Processes in Mechanics, Solid Mechanics and Its Applications*, 2005, Vol. 122, No. III., pp. 213-222, doi: 10.1007/1-4020-3268-4_20

Paulo B. Gonçalves and Zenón J. G. N. Del Prado, “Low-Dimensional Galerkin Models for Nonlinear Vibration and Instability Analysis of Cylindrical Shells”, *Nonlinear Dynamics*, Vol. 41, Nos. 1-3, 2005, pp. 129-145, doi: 10.1007/s11071-005-2802-3

Paulo B. Gonçalves, Frederico M.A. Silva and Zenón J.G.N. del Prado, “Transient and steady state stability of cylindrical shells under harmonic axial loads”, *International Journal of Non-Linear Mechanics*, Vol. 42, No. 1, January 2007, pp. 58-70, Special Issue: Nonlinear Dynamic Stability of Nonconservative Dissipative Systems, doi:10.1016/j.ijnonlinmec.2006.12.011

P.B. Gonçalves, D. Pamplona and S.R.X. Lopes (Civil Engineering Department, Pontifical Catholic University, PUC-Rio 22453-900, Rio de Janeiro, Brazil), “Finite deformations of an initially stressed cylindrical shell under internal pressure”, *International Journal of Mechanical Sciences*, Vol. 50, No. 1, January 2008, pp. 92-103, doi:10.1016/j.ijmecsci.2007.05.001

Paulo B. Gonçalves and Donald Mark Santee, “Influence of Uncertainties on the Dynamic Buckling Loads of Structures Liable to Asymmetric Postbuckling Behavior”, *Mathematical Problems in Engineering* Volume 2008, Article ID 490137, 24 pages doi:10.1155/2008/490137

P.B. Gonçalves, F.M.A. Silva and Z.J.G.N. Del Prado, “Low-dimensional models for the nonlinear vibration analysis of cylindrical shells based on a perturbation procedure and proper orthogonal decomposition”, *Journal of Sound and Vibration*, Vol. 315, No. 3, 19 August 2008, pp. 641-663, Special Issue: EUROMECH colloquium 483, Geometrically non-linear vibrations of structures, doi:10.1016/j.jsv.2008.01.063

Z. del Prado, P.B. Gonçalves and M.P. Païdoussis, "Nonlinear vibrations and imperfection sensitivity of a cylindrical shell containing axial fluid flow", *Journal of Sound and Vibration*, Vol. 327, Nos. 1-2, October 2009, pp. 211-230, doi:10.1016/j.jsv.2009.06.016

Zenon N. del Prado and Paulo B. Gonçalves, "Influence of Geometry on the Dynamic Buckling and Bifurcations of Cylindrical Shells", *SDSS'Rio 2010 Stability and Ductility of Steel Structures* E. Batista, P. Vellasco, L. de Lima (Eds.) Rio de Janeiro, Brazil, September 8 - 10, 2010

Zenon del Prado, Paulo B. Gonçalves and Michael P. Païdoussis, "Non-linear vibrations and instabilities of orthotropic cylindrical shells with internal flowing fluid", *International Journal of Mechanical Sciences*, Vol. 52, No. 11, November 2010, pp. 1437-1457, Special Issue on Non-linear Oscillations, doi:10.1016/j.ijmecsci.2010.03.016

Gonçalves, P.B., Silva, F.M.A., Rega, G. and Lenci, S., 2011, "Global dynamics and integrity of a two-dof model of a parametrically excited cylindrical shell", *Nonlinear Dynamics*, Vol. 63, pp. 61-82.

Frederico M. A. Silva, Paulo B. Gonçalves and Zenón J. G. N. del Prado, "An alternative procedure for the non-linear vibration analysis of fluid-filled cylindrical shells", *Nonlinear Dynamics*, 2011, doi: 10.1007/s11071-011-0037-z

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