



Professor Adriano Calvi

See:

https://www.researchgate.net/profile/Adriano_Calvi

Directorate of Science, Section TOS-MCS, 2200 AG, European Space Agency, Paris, France

Selected Publications:

D. Vaucher, de la Croix, J. Cadieux, C. Thirard, A. and P. Guy, “Extended study of the vibroacoustic behaviour of the ARTEMIS antenna reflector”, Proceedings of the European Conference on Spacecraft Structures, Materials and Mechanical Testing, Noordwijk, The Netherlands, 29 November – 1 December 2000 (ESA SP-468, March 2001)

S. Fransen, M.F. Pellissetti, H.J. Pradlwarter, Kreis, G.I. Schuëller, A. Calvi, and M. Klein. Stochastic launcher-satellite coupled dynamics analysis. In 2005 European Conference on Spacecraft Structures, Materials and Mechanical Testing, to appear, 2005

M.F. Pellissetti, G.I. Schuëller, H.J. Pradlwarter, A. Calvi, S. Fransen, and M. Klein. Static and dynamic reliability analysis of integral satellite in view of low failure probability. In 2005 European Conference on Spacecraft Structures, Materials and Mechanical Testing, to appear, 2005.

G. I. Schuëller, A. Calvi, H. J. Pradlwarter, S. Fransen, M. F. Pellissetti, C. A. Schenk, M. Klein, and A. Kreis, “Uncertainty and reliability analysis of large aerospace structures”. In Proceedings of the European Conference on Spacecraft Structures, Materials and Mechanical Testing 2005, SP-581, Noordwijk, The Netherlands, September 2005.

Degenhardt, R., Bethge, A., Kling, A., Zimmermann, R., Rohwer, K., Klein, H., Tessmer, J., and Calvi, A., 2007, “Probabilistic Approach for Improved Buckling Knock-Down Factors of CFRP Cylindrical Shells,” Proceedings of the 10th European Conference on Spacecraft Structures, Materials, and Mechanical Testing, DLR, Berlin, Paper No. CEAS-2007-434, CD ISSN 0700-408, pp. 3091-3100.

R. Degenhardt, A. Kling, A. Bethge, J. Orf, L. Kärger, R. Zimmermann, K. Rohwer, and A. Calvi, “Investigations on imperfection sensitivity and deduction of improved knock-down factors for unstiffened CFRP cylindrical shells,” Composite Structures, vol. 92, no. 8, pp. 1939–1946, Jul. 2010.

Michael Link, Marc Boeswald, Sebastien Laborde, Matthias Weiland and Adriano Calvi, “An approach to non-linear experimental modal analysis”, Proceedings of the International Modal Analysis Conference (IMAC-XXVII, Jacksonville, Florida, February 1-4, 2010

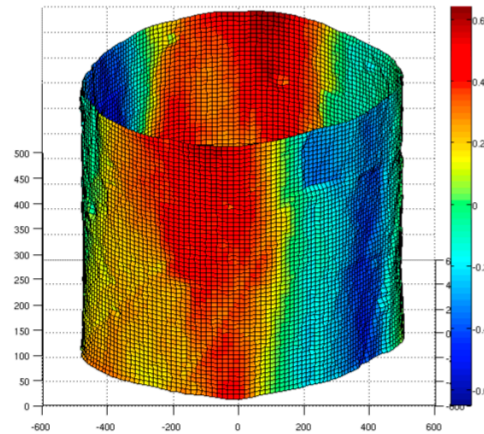


Fig. 2. Surface imperfections of cylinder Z18. The imperfection magnitude has been increased by a factor 100

From: M. Broggi, A. Calvi and G.I. Schueller, Reliability assessment of axially compressed composite cylindrical shells with random imperfections, International Journal of Structural Stability and Dynamics 11 (2011) 215–236.

Adriano Calvi, "Spacecraft structural dynamics & loads – An overview", A presentation distributed to the students of the University of Liege, November 29, 2010

M. Broggi, A. Calvi and G.I. Schueller, Reliability assessment of axially compressed composite cylindrical shells with random imperfections, *International Journal of Structural Stability and Dynamics* 11 (2011) 215–236.

B. Goller, M. Broggi, A. Calvi, and G. I. Schuëller, "A stochastic model updating technique for complex aerospace structures," *Finite Elements in Analysis and Design*, vol. 47, no. 7, pp. 739–752, 2011.

P. Nali, E. Carrera, and A. Calvi, Advanced Fully Coupled Thermo-Mechanical Plate Elements for Multilayered Structures Subjected to Mechanical and Thermal Loading, *Int. J. Numer. Meth. Eng.*, vol. 85, pp. 869–919, 2011

G. Giunta, Y. Koutsawa, S. Belouettar, and A. Calvi, "A dynamic analysis of three-dimensional functionally graded beams by hierarchical models," *Smart. Struct.Syst.*, vol. 13, no. 4, pp. 637–657, 2014.