



Figure 2. Fibre microbuckling and stress profile in a heavily bent laminate, taken from Murphey et al. (2001).

Professor Francisco López Jiménez

From: Francisco Lopez Jimenez and Sergio Pellegrino, "Folding of thin-walled composite structures with a soft matrix", AIAA/ASME Structures, Structural Dynamics and Materials Conference, May 2009

See:

<https://scholar.google.com/citations?user=XHcXvhIAAAAJ&hl=en>

<https://www.colorado.edu/aerospace/francisco-lopez-jimenez>

https://www.researchgate.net/profile/Francisco_Lopez_Jimenez3

Center for Aerospace Structures (CAS)
Ann and H.J. Smead Aerospace Engineering Sciences
University of Colorado Boulder, USA

Education:

PhD, Aeronautics, California Institute of Technology, 2011
MSc, Aerospace Engineering, California Institute of Technology, 2007
Engineering Degree, Mechanical Engineering, University of Seville (Spain), 2006

Research Interests:

Instabilities, Lightweight structures, Deployable structures, Soft solids

Professional Experience:

2017 - Present, Assistant Professor, AES, University of Colorado
2013 - 2016, Postdoctoral Associate, Massachusetts Institute of Technology
2011 - 2013, Postdoctoral Associate, Laboratoire de Mécanique des Solides, École Polytechnique (France)
2007 - 2011, Research Assistant, California Institute of Technology

Selected Publications:

Francisco Lopez Jimenez (University of Colorado Boulder) and Sergio Pellegrino (California Institute of

Technology), “Folding of thin-walled composite structures with a soft matrix”, AIAA/ASME Structures, Structural Dynamics and Materials Conference, May 2009

F. Lopez Jimenez and N. Triantafyllidis, “Buckling of rectangular and hexagonal honeycomb under combined axial compression and transverse shear”, *International Journal of Solids and Structures*, Vol. 5, No. 24, pp 3934-3946, November 2013

Pedro M. Reis, Francisco Lopez Jimenez and Joel Marthelot (EGS Lab, MIT), “Transforming architectures inspired by origami”, *Proceedings of the National Academy of Sciences*, Vol. 112, No. 40, pp 12234-12235, 2015

Joel Marthelot, Anna Lee, Pierre-Thomas Brun, Francisco Lopez Jimenez and Pedro M. Reis (MIT), “Periodic buckling patterns on constrained elastic shells”, Paper P40.00007, *Bulletin of the American Physical Society*, APS March 2016 Meeting, Baltimore, Maryland, <http://meetings.aps.org/link/BAPS.2016.MAR.P40.7>, 2016

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Joel Marthelot, Anna Lee, Pierre-Thomas Brun, Francisco Lopez Jimenez, Pedro M. Reis (MIT, Cambridge, MA), “Periodic buckling patterns on constrained elastic shells”, Abstract ID BAPS.2016.MAR.P40.4

Anna Lee, Joel Marthelot, Francisco Lopez Jimenez, Pierre-Thomas Brun and Pedro Reis (MIT, Cambridge, MA), “Defect-controlled buckling of depressurized elastic shells”, Abstract ID BAPS.2016.MAR.P40.5, 2016

Anna Lee, Francisco Lopez Jimenez, Joel Marthelot, John W. Hutchinson and Pedro M. Reis, “The geometric role of precisely engineered imperfections on the critical buckling load of spherical elastic shells”, *ASME Journal of Applied Mechanics*, Vol. 83, 111005, November 2016, DOI: 10.1115/1.4034431

Francisco Lopez Jimenez, Joel Marthelot, Anna Lee, John W. Hutchinson and Pedro M. Reis, “Knockdown factor for the buckling of spherical shells containing large-amplitude geometric defects”, *Journal of Applied Mechanics*, Vol. 84, No. 3, March 2017 (or is it January 2017?) doi: 10.1115/1.4035665

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