



Professor Anna Lee



From: 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

See:

<https://scholar.google.com/citations?user=vIILU0QAAAAJ&hl=ko>

<https://www.annalee-mechanics.com/>

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Biography:

Anna Lee is a Post-Doc at the École Polytechnique Fédérale de Lausanne (EPFL), where she moved to on January 1st, 2018. She received her B.S. and M.S. both in Mechanical & Aerospace Engineering from the Seoul National University (SNU), South Korea (2011 & 2013, respectively). She worked as a research associate at the Institute of Advanced Machinery and Design in SNU (2013-2014) and then earned her Ph.D. in Mechanical Engineering from the Massachusetts Institute of Technology (2018). She is interested in the aerodynamics of bird wings, focusing on the effects of their mechanical structure and topography on the aerodynamic performance. She is also involved in the buckling of thin shells, which was the topic of her Ph.D. study. She is a member of the APS and the Korean Society of Mechanical Engineers (KSME).

Selected Publications:

Anna Lee, Joel Marthelot, Pierre-Thomas Brun, Pedro M. Reis (EGS Lab, MIT), “The chocolate-egg problem: Fabrication of thin elastic shells through coating”, APS Meeting Abstracts, Vol. 1, page 44005, March 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

Rashed Al-Rashed, Francisco Lopez Jimenez, Joel Marthelot, Anna Lee and Pedro Reis, "Surface morphology of pre-stressed bilayer shells for tunable optical transmittance", APS Meeting Abstracts, 2016

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

Joel Marthelot, Francisco Lopez Jimenez, Anna Lee, John W. Hutchinson and Pedro M. Reis, "Buckling of a pressurized hemispherical shell subjected to a probing force", ASME Journal of Applied Mechanics, Vol. 84, No. 12, December 2017, Paper No: JAM-17-1475; doi: 10.1115/1.4038063