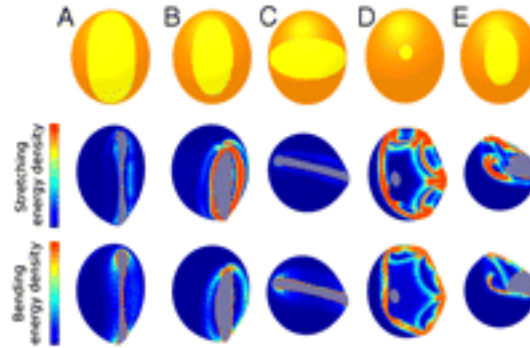




**Professor Enrique A. Cerda**



From: Eleni Katifori, Silas Alben, Enrique Cerda, David R. Nelson and Jacques Dumais, “Natural foldable structures and the design of pollen grains”, PNAS, Vol. 107, No. 17, February 2010

See:

<https://translate.google.com/translate?hl=en&sl=es&u=http://www.fisica.usach.cl/users/enrique&prev=search>

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### **Biography:**

After graduating in science at the Faculty of Physical Sciences at the University of Chile in 1993, I started my PhD in Physical Sciences under the tutelage of Professor Enrique Tirapegui. My thesis was about phenomena in viscous fluids and part of the area which is known by the name of Nonlinear Physics. Titled in 1996 my next step was to conduct a post-doctorate at the Massachusetts Institute of Technology (MIT) under the guidance of Professor L. Mahadevan. My work at the University of Santiago began in 1998. In 2001 I took a visiting professor position at the University of Cambridge until 2003 at the Department of Applied Mathematics and Theoretical Physics (DAMTP, Cambridge-England) and then resumed my academic work at the University of Santiago. From then until now I have made a continuous work of academic work and research.

### **Selected Publications:**

E. Cerda and L. Mahadevan, “Conical surfaces and crescent singularities in crumpled sheets”, Physical Review Letters, Vol. 80, pp 2358-2361, 1997

E. Cerda, S. Chaieb, F. Melo and L. Mahadevan, “Conical dislocations in Crumpling”, Nature, Vol. 401, pp 46-49, 1998

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E. Cerda and L. Mahadevan, “Geometry and physics of wrinkling”, *Physical Review Letters*, Col. 90, February 2009

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V. Romero, T.A. Witten and E. Cerda, “Multiple coiling of an elastic sheet in a tube”, *Proceedings of the Royal Society A*, November 2008, DOI: 10.1098 / rspa.2007.0372

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Vella D, Adda-Bedia M, Cerda E. Capillary wrinkling of elastic membranes. *Soft Matter*. 2010;6:5778–5872.

B. Davidovitch, R.D. Schroll, D. Vella, M. Adda-Bedia, and E. Cerda, “Prototypical model for tensional wrinkling in thin sheets”, *PNAS*, 108(45):18227–18232, 2011.

Davidovitch B, Schroll RD, Cerda E., “Nonperturbative model for wrinkling in highly bendable sheets”, *Phys. Rev. E Stat. Nonlin. Soft Matter Phys*, Vol. 6, No. 2, 066115, June 2012