



**Professor Slade Gellin**

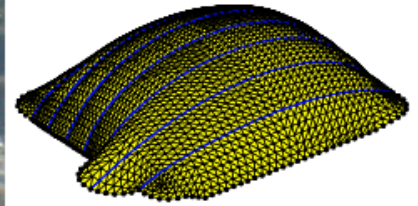


Figure 3: (a) A large pneumatic dome reinforced by sliding cables; (b) finite element mesh and equilibrium geometry under internal pressure.

From: Ruy M.L. Pauletti and Slade Gellin, "The influence of cable sliding on the structural response of a large pneumatic envelope", Proceedings of the International Association for Shell and Spatial Structures (IASS), 2015, Future Visions, 17-20 August 2015, Amsterdam, The Netherlands

See:

[https://www.researchgate.net/profile/Slade\\_Gellin](https://www.researchgate.net/profile/Slade_Gellin)

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#### **Selected Publications:**

Gellin, S., "Effect of an Axisymmetric Imperfection on the Plastic Buckling of an Axially Compressed Cylindrical Shell," *Journal of Applied Mechanics*, Vol. 46, 1979, pp. 125-131

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Slade Gellin, "A new class of solutions for buckling of a short cylindrical shell in pure bending", *International Journal of Mechanical Sciences*, Vol. 24, No.11, 1982, pp.691-697

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Gellin S. Finite element analysis of tensioned fabric cone structures without radial cables. IASS 2006. New Olympics, New Shell and Spatial Structures, Xue S.D. (ed.), 2006.

Gellin S. Finite element analysis of tensioned fabric cone structures. IASS 2007. Structural Architecture – Towards the Future Looking to the Past, Seviero E. (ed.), 2007.

Gellin S. Finite element analysis of tensioned fabric cone structures with bi-planar symmetry. IASS 2008. New Materials and Technologies, New Designs and Innovations, Oliva J.G. (ed.), 2008.

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Slade Gellin, "Finite element analysis of tensioned fabric cone structures using a modified assumption on the meridional stress", Proceedings of the International Association for Shell and Spatial Structures (IASS) 2009, Evolution and Trends in Design, Analysis and Construction of Shell and Spatial Structures 28 September – 2 October 2009, Universidad Politecnica de Valencia, Spain (Alberto Domingo and Carlos Lazaro, editors)

Slade Gellin and Ruy M.O. Pauletti, "Form finding of tensioned fabric cone structures using the natural force density method", Proceedings of the International Association for Shell and Spatial Structures (IASS) Symposium 2010, November 8-12, 2010, Shanghai, China

Gellin S, and Pauletti RMO., "Form finding of tensioned fabric cone structures with bi-planar symmetry using the natural force density method", Proc. IASS 2011 Symposium, Nethercot D and Pellegrino S (eds.) 2011.

Gellin S, and Pauletti RMO., “Necking limits of conoid membrane structures with variable stress ratio”, Proc. 7th IASS-IACM Symposium 2012, Ibrahimbegovic A (ed.) 2012

P.D. Gosling, B.N. Bridgens, A. Albrecht, H. Alpermann, A. Angeleri, M. Barnes, N. Bartle, R. Canobbio, F. Dieringer, S. Gellin, W.J. Lewis, N. Mageau, R. Mahadevan, J-M. Marion, P. Marsden, E. Milligan, Y.P. Phang, K. Sahlin, B. Stimpfle, O. Suire, J. Uhlemann, “Analysis and design of membrane structures: results of a round robin exercise”, Engineering Structures, January 2012, DOI: 10.1016/j.engstruct.2012.10.008

Ruy M.L. Pauletti and Slade Gellin, “The influence of cable sliding on the structural response of a large pneumatic envelope”, Proceedings of the International Association for Shell and Spatial Structures (IASS), 2015, Future Visions, 17-20 August 2015, Amsterdam, The Netherlands

Slade Gellin and Ruy M.L. Pauletti, “Necking limits of conoid membrane structures between elliptical rings with variable stress ratio”, Conference paper (unidentified conference in the pdf file), July 2018