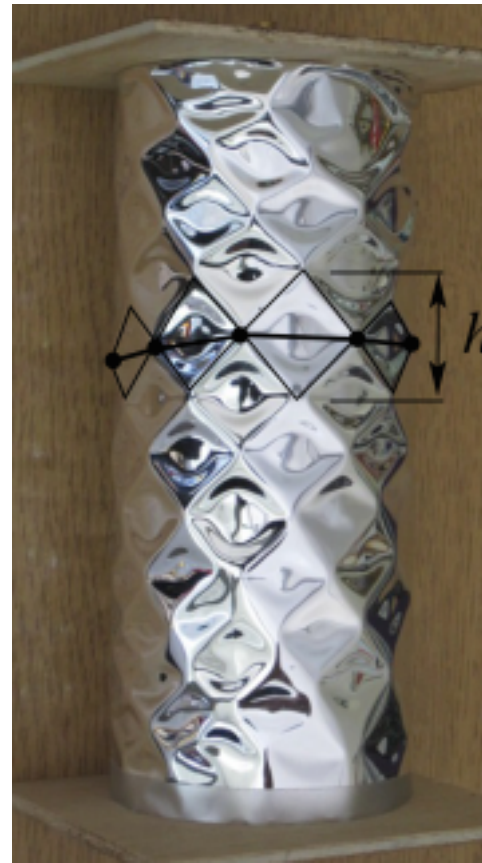




**Professor Keith A. Seffen**



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See:

<http://www2.eng.cam.ac.uk/~kas14/>

<http://www-civ.eng.cam.ac.uk/struct/kas/>

<http://www2.eng.cam.ac.uk/~kas14/publicationsChron.html>

[http://www3.eng.cam.ac.uk/research\\_db/publications/kas14](http://www3.eng.cam.ac.uk/research_db/publications/kas14)

<http://www-civ.eng.cam.ac.uk/struct/kas/publications.html>

[https://scholar.google.co.uk/citations?user=goq\\_SIOAAAJ&hl=en](https://scholar.google.co.uk/citations?user=goq_SIOAAAJ&hl=en)

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**Summary:**

Dr Seffen jointly runs the Advanced Structures Group with Dr Simon Guest, researching and finding solutions for novel lightweight, deployable and/or shape-changing (morphing) structures. KAS is a Chartered Mathematician, and a member of the Institute of Maths and its Applications (IMA) and the American Institute of Aeronautics and Astronautics (AIAA). He is Director of Studies for Engineering at Corpus Christi, and he lectures on Structural Mechanics in CUED throughout the Tripos.

**Selected Publications:**

Audoly, B and Seffen, KA (2015) Buckling of Naturally Curved Elastic Strips: The Ribbon Model Makes a Difference. *Journal of Elasticity*, 119. pp. 293-320. ISSN 0374-3535

Loukaides, EG and Seffen, KA (2015) Multistable grid and honeycomb shells. *International Journal of Solids and Structures*, 59. pp. 46-57. ISSN 0020-7683

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Bonin, AS and Seffen, KA (2014) De-wrinkling of pre-tensioned membranes. *International Journal of Solids and Structures*, 51. pp. 3303-3313. ISSN 0020-7683

Loukaides, EG and Smoukov, SK and Seffen, KA (2014) Magnetic actuation and transition shapes of a bistable spherical cap. *International Journal of Smart and Nano Materials*, 5. pp. 270-282. ISSN 1947-5411

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Seffen, KA (2002) Analysis of coiled piezoelectric structures. In: *New Approaches to Structural Mechanics, Shell and Biological Structures. Solid Mechanics and Its Applications*, 104 . Kluwer, Netherlands, pp. 215-228.

Seffen, KA (2001) On the behavior of folded tape-springs. *Transactions of the ASME: Journal of Applied Mechanics*, 68. pp. 369-375. ISSN 0021-8936

Seffen, KA and You, Z and Pellegrino, S (2000) Folding and deployment of curved tape springs. *International Journal of Mechanical Sciences*, 42. pp. 2055-2073. ISSN 0020-7403

Seffen, KA and Pellegrino, S (1999) Deployment dynamics of tape springs. *Proceedings of the Royal Society of London A: Mathematical, Physical and Engineering Sciences*, 455. pp. 1003-1048. ISSN 1364-5021