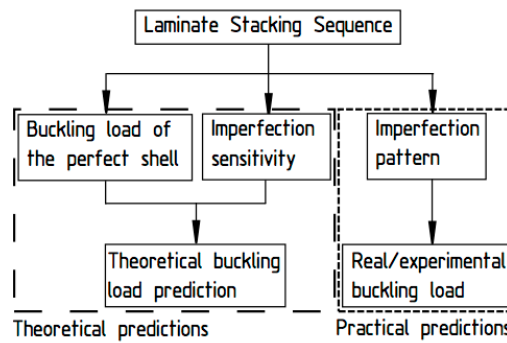




**Professor Kai-Uwe Schröder**



Influence of the laminate stacking sequence of composite shell structures on the structural response

Linus Friedrich, Pawel Lyssakow, Garth Pearce, Martin Ruess, Chiara Bisagni and Kai-Uwe Schröder, “On the structural design of imperfection sensitive laminated composite shell structures subjected to axial compression”, ECCOMAS Congress 2016, VII European Congress on Computational Methods in Applied Sciences and Engineering M. Papadrakakis, V. Papadopoulos, G. Stefanou, V. Plevris (eds.) Crete Island, Greece, 5–10 June 2016

See:

<http://www.sla.rwth-aachen.de/cms/Institut-fuer-Strukturmechanik-und-Leichtbau/Der-Lehrstuhl/Mitarbeiter/Lehrstuhl-Leitung/~fuve/Kai-Uwe-Schroeder/lidx/1/>

### Curriculum vitae:

since 2013 Professor of Structural Mechanics and Lightweight Design at RWTH Aachen University

2012 - Assistant Professor at the Institute of Constructional Lightweight Design at Johannes Kepler University Linz, Austria

2010 - Senior Researcher at the Institute of Constructional Lightweight Design at Johannes Kepler University Linz, Austria

2008 - Senior Engineer Method Development and project manager at ELAN-AUSY GmbH, Hamburg  
2009 (former ELAN GmbH)

2007 Phd (summa cum laude)

2005 - R&D Engineer ELAN GmbH, Hamburg  
2007

1999 - Researcher at the Institute of Structural Analysis and Dynamics at Leibniz Universität Hannover  
2005

1999 Diploma

1993 - Studies of Civil Engineering at Leibniz Universität Hannover  
1999

### Selected Publications:

Linus Friedrich, Pawel Lyssakow, Garth Pearce, Martin Ruess, Chiara Bisagni and Kai-Uwe Schroder, “On the structural design of imperfection sensitive laminated composite shell structures subjected to axial compression”, ECCOMAS Congress 2016, VII European Congress on Computational Methods in Applied Sciences and Engineering M. Papadrakakis, V. Papadopoulos, G. Stefanou, V. Plevris (eds.) Crete Island, Greece, 5–10 June 2016

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M.N. Rao, R. Schmidt and K.-U. Schröder, Geometrically nonlinear static FE-simulation of multilayered magneto-electro-elastic composite structures, *Composite structures*, Vol. 127, pp 120-131, 2015

M.N. Rao, R. Schmidt and K.-U. Schröder, Finite rotation FE-simulation and active vibration control of smart composite laminated structures, *Computational Mechanics*, Vol. 55, No. 4, pp 719-735, 2015

M. Chaves-Vargas, A.D. Dafnis, H.-G. Reimerdes and K.-U. Schröder, Modal parameter identification of a compression-loaded CFRP stiffened plate and correlation with its buckling behaviour, *Progress in Aerospace Sciences*, Vol. 78, pp 39-49, 2015

Linus Friedrich, Simon Loosen, Ke Liang, Martin Ruess, Chiara Bisagni and Kai-Uwe Schröder, Stacking sequence influence on imperfection sensitivity of cylindrical composite shells under axial compression, *Composite Structures*, Vol. 134, pp 750-761, 2015

Linus Friedrich and Kai-Uwe Schröder, Preliminary design of circumferential frame stiffeners of space launcher vehicles subjected to axial compression, *Deutscher Luft- und Raumfahrtkongress, DLRK 2015, 22.09.2015-24.09.2015, Rostock, Germany, Report No. RWTH-2015-05249*

Narasimha Rao Mekala, Tarun Sachdeva and Kai-Uwe Schröder, Shape control of piezolaminated thin-walled structures using nonlinear piezoelectric actuators, *86th Annual Meeting of the Gesellschaft für Angewandte Mathematik und Mechanik : held 23 – 27 March 2015 at the University of Salento in Lecce, Italy*

Christoph Viechtbauer, Martin Schagerl and Kai-Uwe Schröder, Validation of Structural Parameters as Damage Indicators for Monitoring Plates in the Post Buckling Regime, *7th European Workshop on Structural Health Monitoring : July 8 - 11, 2014, Nantes, France ; 2nd European Conference of the Prognostics and Health Management (PHM) Society / IFSTTAR; Inria; Université de Nantes; PHM Society.*

Bernhard Mueller, Martin Schagerl and Kai-Uwe Schröder, On the folding of plates which buckle before and beyond the elastic limit, *84th Annual Meeting of the International Association of Applied Mathematics and Mechanics (GAMM), Novi Sad 2013 / Editors: L. Cvetković, T. Atanacković and V. Kostić*

Gerhard Prechtel, Martin Schagerl and Kai-Uwe Schröder, Geometrically exact solution of a buckling column with asymmetric boundary conditions, *Proceedings in Applied Mathematics and Mechanics*, Vol. 12, No. 1, 2012

Kai-Uwe Schröder and Christian Mittelstedt, Geometrically Nonlinear Approximate Solution For The Circumferential Buckling Problem in Hat-Stringer-Stiffened Composite Fuselage Panels, *Composites 2011 :*

ECCOMAS Thematic Conference, 3rd International Conference on the Mechanical Response of Composites, Hannover, 21 - 23 September, 2011

Christian Mittelstedt, Henrike Erdmann and Kai-Uwe Schröder, Postbuckling of imperfect rectangular composite plates under inplane shear closed-form approximate solutions, archive of Applied Mechanics, Vol. 81, No. 10, pp 1409-1426, 2011

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Kai-Uwe Schröder and Christian Mittelstedt, Postbuckling of Compressively Loaded Imperfect Composite Plates: Closed-Form Approximate Solutions, International Journal of Structural Stability and Dynamics, Vol. 10, No. 4, pp 761-778, 2010