

Professor Andreas Rittweger



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Biography:

Andreas Rittweger since February 2014 professor of aerospace engineering at the Department of Production Engineering at the University of Bremen. He is also the new director of the Institute for Space Systems of the DLR (German Aerospace Center). Rittweger studied at the RWTH Aachen Aviation and aerospace engineering and a PhD at the Institute for Lightweight on the calculation of **anisotropic shell structures**. In the aerospace industry, he gained experience in the development of the Ariane 5 rocket, initially in Bremen, later in Les Mureaux near Paris. There, he managed the spacecraft engineering, among others responsible for the mechanics, the thermal budget and the construction of the Ariane 5 rocket and future support systems. In Bremen Rittweger will study at the Institute of Space Systems Concepts future spacecraft and space missions, develop scientific small satellites and planetary landers and build and to participate in the exploration of critical system-related technologies for future transport systems, landing and science missions.

Selected publications:

Andreas Rittweger and H. Öry (Institut für Leichtbau, RWTH Aachen, Germany), "Stability-analysis of elastic shells of revolution with the transfer-matrix-method – a fast and reliable approach based on the exact solution of the shell equations", in Buckling of shell structures, on land, in the sea, and in the air, edited by J. F. Jullien, Spon Press, 1991, ISBN 1-85166-716-4

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"Dimensioning of Orthotropic Stiffened CFRP Shells of Large Launch Vehicle for Load Introduction and Stability", (publisher and date not given in the pdf file; latest reference is 1991)

A. Rittweger, Th. Schermann, H. -G. Reimerdes and H. Öry (Institut für Leichtbau, Technical University Aachen, Wüllnerstr, 7, 52062, Aachen, Germany), "Influence of geometric imperfections on the load capacity of orthotropic stiffened and composite shells of revolution with arbitrary meridians and boundary conditions", Thin-Walled Structures, Vol. 23, Nos. 1-4, 1995, pp. 237-254, Special Issue: Buckling Strength of Imperfection-sensitive Shells, doi:10.1016/0263-8231(95)00014-5

H. Öry (1), H.-G. Reimerdes (1), T. Schmid (1), A. Rittweger (2) and J. Gómez Garcia (2) (1) Institut für Leichtbau, Aachen University of Technology (RWTH Aachen), Germany (2) Astrium GmbH, Space Infrastructure, Bremen, Germany

"Imperfection sensitivity of an orthotropic spherical shell under external pressure", International Journal of Non-Linear Mechanics, Vol. 37, Nos. 4-5, June 2002, pp. 669-686, Special Issue: Stability & Vibration in Thin-Walled Structures, doi:10.1016/S0020-7462(01)00091-9