



Professor Joris J.C. Remmers

R. De Borst, M.A. Crisfield, J.J.C. Remmers, C.V. Verhoosel, Non-linear Finite Element Analysis of Solids and Structures, 2nd Edition, John Wiley & Sons, Ltd., United Kingdom, 2012.

See:

https://www.researchgate.net/profile/Joris_Remmers

<https://scholar.google.nl/citations?user=C5I2Pb8AAAAJ&hl=en>

<https://www.tue.nl/en/university/departments/mechanical-engineering/the-department/staff/detail/ep/e/d/ep-uid/20072410/>

Chair, Department of Computational Solid Mechanics
Technical University Eindhoven, Eindhoven, The Netherlands

Biography:

Joris Remmers (Tilburg, 1974) studied Aerospace Engineering at Delft University of Technology. He graduated in 1998 after finishing his Master's Thesis on the simulation of mode-jumping in beam and shell structures. In 2006 he obtained his PhD at the same university on the simulation of crack propagation in materials and structures by using the partition of unity method. In September 2007 he became an Assistant Professor at the department of Mechanical Engineering at Eindhoven University of Technology.

Selected Publications:

Book:

R. De Borst, M.A. Crisfield, J.J.C. Remmers, C.V. Verhoosel, Non-linear Finite Element Analysis of Solids and Structures, 2nd Edition, John Wiley & Sons, Ltd., United Kingdom, 2012.

Journal Articles, etc.:

J. J. C. REMMERS, Mode-jumping with B2000, Master's thesis, Delft University of Technology, Delft, The Netherlands, 1998.

J.J.C. Remmers and R. de Borst, "Numerical modeling: delamination buckling", Chapter in Fibre Metal Laminates, pp 281-297, 2001

Remmers, J. and Borst, R., Delamination Buckling of Fibre-Metal Laminates. *Composites Science and Technology*, Volume 61, Pages 2207-2213. June 2001.

Remmers JJC, de Borst R and Needleman A (2003). A cohesive segments method for the simulation of crack growth. *Comp Mech* 31: 69–77

Wells GN, Remmers JJC, Sluys LJ, de Borst R. A large strain discontinuous finite element approach to laminated composites. *IUTAM Symp Comput Mech Solid Mater Large Strains* 2003:355–64.

Verhoosel CV, Remmers JJC, Gutierrez MA (2008) A dissipation-based arc-length method for robust simulation of brittle and ductile failure. *Int J Numer Methods Eng* 77:1290–1321

Remmers JJC, Wells GN, de Borst R. A solid-like shell element allowing for arbitrary delaminations. *Int J Numer Methods Engng* 2003;58:2013–40.

de Borst R, Remmers JJC, Needleman A, Abellan M-A. Discrete vs smeared crack models for concrete fracture: bridging the gap. *Int J Numer Anal Methods Geomech* 2004;28:583–607.

René de Borst, Joris J.C. Remmers and Alan Needleman, “Mesh-independent discrete numerical representations of cohesive-zone models” (a review), *Engineering Fracture Mechanics*, Vol. 73, No. 2, January 2006, pp. 160-177, Special Issue: Advanced Fracture Mechanics for Life Safety Assessments

S. Hosseini, J.J.C. Remmers, C.V. Verhoosel, and R. de Borst. An isogeometric solid-like shell element for nonlinear analysis. *International Journal for Numerical Methods in Engineering*, 95:238–256, 2013

Hosseini S, Remmers JJC, Verhoosel CV, Borst RD. An isogeometric continuum shell element for non-linear analysis. *Comput Methods Appl Mech Eng* 2014;271:1–22.