

## Kerstin Weinberg



Kerstin Weinberg studied Mechanical Engineering at the Universities of Magdeburg (Germany) and Charkow (Ukraine) and graduated in 1996. As a student, she focused on solid mechanics, and her PhD work was on finite-element technology, high-order elements, and error estimates. She later joined the Numerical Mathematics group of Carsten Carstensen in Kiel to develop adaptive finite-element algorithms for plates. She continued this work when she got a faculty position at the Mathematics Department of the Medical University in Lübeck (Germany). Following this, she joined the group of Michael Ortiz at the California Institute of Technology in Pasadena, (USA) in 2001. Within the ASCI-Center for Simulation of Dynamic Response of Materials, she developed models for the failure of ductile metals and cavitation damage in biological soft tissue. Back in her hometown at the Technical University of Berlin in 2004, Kerstin Weinberg found interest in smaller scales of the material. So she looked at the computation of alloy decomposition and wrote her habilitation thesis on the material modeling of microstructured solids, and was awarded her Habilitation in Mechanics in 2007. Since 2008 Kerstin Weinberg has been a Full Professor (Chair of Solid Mechanics) at the University of Siegen. With her Solid Mechanics group, she is working on topics ranging from experimental and numerical investigations of dynamic fracture, microstructured materials, and damage in soft polymers to data-driven numerical approaches and the corresponding multi-field simulations. Kerstin Weinberg has an extensive and distinguished publication record, and is on the Editorial Board of the journals *Mechanics of Materials*, *European Journal of Mechanics A*, *Technische Mechanik*, and *Continuum Mechanics and Thermodynamics*, and is a member of EUROMECH and the European Solid Mechanics Committee.

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