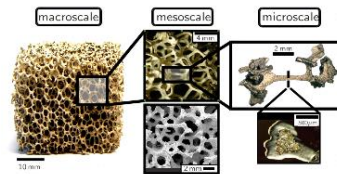
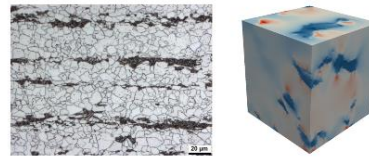


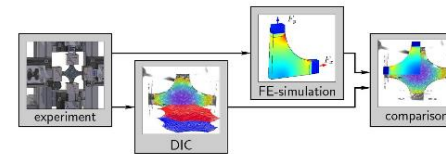
## Metal foams and hybrid foams



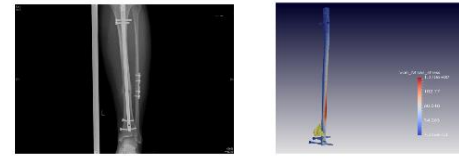
## Microstructural modelling of multi-phase steel



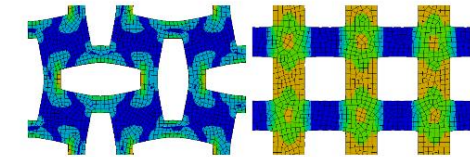
## Viscoelasticity of polymers



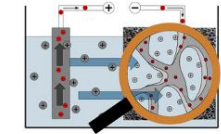
## Personalized design of implants and prostheses



## Characterization of auxetic materials



## Electrochemical deposition on cellular materials



The development of mechanical models becomes more and more an interdisciplinary field of research which is worked on in the team by scientists of different fields. A special challenge in the area of research is in particular to describe smaller and lighter components. Amongst others, foamed materials are modeled at the Chair of Applied Mechanics. Experiments are carried out and theoretical models and the accompanying numerical procedures are developed.

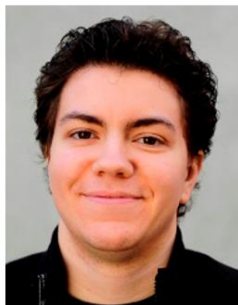
For more information: <http://www.ltm.uni-saarland.de>

## EEIGM Teacher/Researcher involved

**Stefan Diebels**



**Anne Jung**



**Wolfgang Ripplinger**



**Joachim Schmitt**



**Michael Roland**



### Expertise:

Continuum mechanics, extended continuum theories, experimental mechanics, micromechanics, biomechanics, numerical methods

### Teaching:

Statics, dynamics, mechanics of materials, continuum mechanics, materials modeling, experimental mechanics, analytical mechanics, numerical mechanics, finite elements