Numerical Simulation of Liquid-Filled, Fibre-Reinforced Materials

Motivation

- Numerical simulation of liquid-filled, fibre-reinforced materials using the Theory of Porous Media (TPM)
- Influence of defects and damage on material behaviour
- Basis for clinical and technical applications

Possible topics (Bachelor’s or Master’s thesis)

- Parameter study to investigate the influence of various factors on the material behaviour
- Comparison of different FE programs for the description of the material
- Validation of simulation results with experimental data

Prior knowledge of the following is of advantage:

- Numerical simulations
- FEM (Einführung in die FEM, Numerik)
- Programming experience

Contact: Pfaffenwaldring 27, 70569 Stuttgart
Office: 00.050
Tel.: 0711 685-60913
E-Mail: franziska.egli@isd.uni-stuttgart.de

Please don’t hesitate to contact us for further information.