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Contact Elements in CONFEM
(Kontaktelemente in CONFEM)

For the simulation of composite material two bodies with own material properties are modeled. Because they work together as one unit the interaction has to be taken into regard.

In order to be able to get an appropriate numerical FEM simulation special interaction elements are used. The simplest one of these elements are contact elements which can be extended to provide for example cohesion and shearing interaction.

The task of the student is to get familiar with theoretical background of contact elements related to rheological models and implementation in the FEM. Furthermore, contact elements shall be implemented in the CONFEM code. The proper functioning of the created elements has to be proofed and validated with small examples by comparison with theoretical behaviour.

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