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Seminar über Fragen der Mechanik

zu folgendem Vortrag wird herzlich eingeladen

Dienstag, **17.09.2019, 09:00 Uhr**, Immerwahrstr. 1, Raum 01.025

Modal Derivatives based Reduction Method for nonlinear Finite Elements using Shape Adaption

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This presentation provides a short overview of the problem description, objectives and results of the present master thesis. Special attention is paid to a modal derivatives based reduction method for nonlinear finite elements using shape adaption. Modal derivatives are extending the idea of using a subset of linear eigenmodes to reduce the system complexity and provide the possibility to reduce geometrical and material nonlinear systems. Numerical examples are shown to highlight the potential of this complexity reduction method, along with the importance of choosing proper eigenmodes and modal derivatives for a sufficient result.

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