



**Universität Stuttgart**

Institut für Baustatik und Baudynamik

# Vortrags- ankündigung

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## „NGSolve – A Framework for Advanced Finite Element Methods“

NGSolve is a finite element software which combines a symbolic language for specifying variational formulations, with high order finite element spaces and advanced iterative solvers.

The symbolic language is based on Python, and allows to define finite element spaces, linear and bilinear-forms, and numerical algorithms on a high level. The computational intense work is performed by a parallel library implemented in modern C++.

In this talk we show how NGSolve contributes to research in different areas. We give examples including non-linear models, fast methods for time-dependent problems, and shape optimization problems on top.

Donnerstag, 16. Januar 2020, 9:00 Uhr

Multimedia-Hörsaal

am Institut für Baustatik und Baudynamik

Pfaffenwaldring 7, Raum 1.155

<https://www.ibb.uni-stuttgart.de/>