SPC-PM3AdH
Finite Element Computations on Locally Refined
Hexahedral Meshes with Hanging Nodes

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This contribution presents an overview about applications of the finite element package SPC-PM3AdH, which was developed in the group of Arnd Meyer within the SFB 393 at the TU Chemnitz. The software has also been used and extended for high order finite element computations in three space dimensions. We show applications of the software

- for adaptive finite element computations of scalar and vector valued problems,
- with high order finite elements,
- with boundary concentrated elements
- to applications to optimal control.

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