Graduiertenkolleg 2075
Modelle für die Beschreibung
der Zustandsänderung bei
Alterung von Baustoffen

Technische
Universität
Braunschweig

MUSEN

Vortrag im Gästeprogramm des GRK 2075

MUSEN Kolloquium im Sommersemester 2017

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A simple and efficient virtual element formulation for finite elastoplastic deformations

Donnerstag, 01.06.2017, 16.45 bis 18.00 Uhr
Okerhochhaus, Seminarraum EG
Pockelsstraße 3, 38106 Braunschweig

Virtual elements were developed during the last decade and applied to various problems in elasticity. These elements have advantages of being more flexible when the geometry of the element is considered. The success in the linear range of applications leads directly to the question whether these elements can also being applied to nonlinear situations. This paper is concerned with a very simple virtual element formulation and its extension to the nonlinear regime in finite elasticity. Several possible formulations are discussed and compared by means of examples, see e.g. Cooke's membrane below, using different types of meshes and element shapes.

Kontakt

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