Universität der Bundeswehr München
Institut für Mathematik und Computergestützte Simulation

der Bundeswehr Universität München

Algebraic Multigrid Methods | High-Performance Computing | Iterative Solvers | Finite Element Methods | Isogeometric Analysis | Computational Science and Engineering

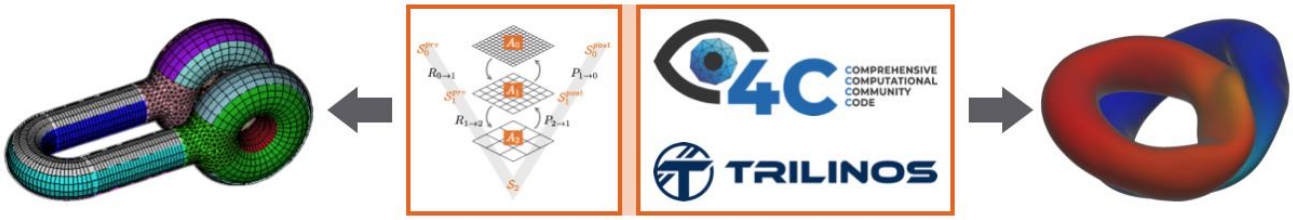
We are looking for a

Research Assistant (m/f/d)

(doctoral position, 100% E13 TVöD)

within the project

Performance-portable multigrid solvers for semi- and block-structured grids in computational solid mechanics



The project aims to devise specialized solvers, efficient algorithms, and performant software implementations to deliver the full potential of modern computing technology for applications in computational solid mechanics (CSM) through the development of scalable and performance-portable algebraic multigrid (AMG) preconditioners with a particular focus on leveraging grid structure in semi- or block-structured grids, as they can arise in complex FEM meshes or multi-patch IGA meshes with their inherent tensor-product characteristics. Research findings will be published in peer-reviewed international journals and open-source software projects such 4C Multiphysics and Trilinos/MueLu.

The project is funded by the German Research Foundation (DFG). The research associate will work independently and in close collaboration with the project leaders and institute head, contributing to the realization and further development of the research vision. The full-time position (100% E13 TVöD) is initially limited to three years. An extension is possible with the successful acquisition of additional research funding and is actively pursued by the institute. The position is explicitly geared toward qualification for a doctorate (Dr.-Ing.), and this goal is actively supported.

Details:

www.unibw.de/imcs-en/jobs

Application

Applications will be reviewed as they are received until the position is filled. Please send your complete application documents (cover letter, CV, and certificates) in a single PDF file **as soon as possible** via email to:

Dr.-Ing. Matthias Mayr, Prof. Dr.-Ing. Alexander Popp
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