New developments in substructuring domain decomposition methods

Gabriele Ciaramella
Politecnico di Milano, Milan, Italy
gabriele.ciaramella@polimi.it

Tommaso Vanzan
École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
tommaso.vanzan@epfl.ch

Abstract

Substructuring methods originated long ago in the engineering community with the goal of facilitating the simulation of complex structures. Since then, groundbreaking achievements have been made, so that substructuring methods are nowadays among the most efficient solvers. This minisymposium has the purpose of gathering several experts and sharing the latest developments, including multilevel variants, non-linear extensions, non-standard applications, substructured versions of overlapping domain decomposition methods and state-of-the-art implementations.

Martin Gander
Université de Genève, Geneva, Switzerland
martin.gander@unige.ch

Gabriele Ciaramella
Politecnico di Milano, Italy
gabriele.ciaramella@polimi.it

Silvia Bertoluzza
IMATI, Italy
silvia.bertoluzza@imati.cnr.it

Pratik M. Kumbhar
Karlsruher Institut für Technologie, Germany
pratik.kumbhar@kit.edu

Tommaso Vanzan
École Polytechnique Fédérale de Lausanne
tommaso.vanzan@epfl.ch

Serge Van Criekingen
CNRS, France

serge.van.criekingen@idris.fr

Marta D'Elia
Sandia National Laboratories, USA
mdelia@sandia.gov