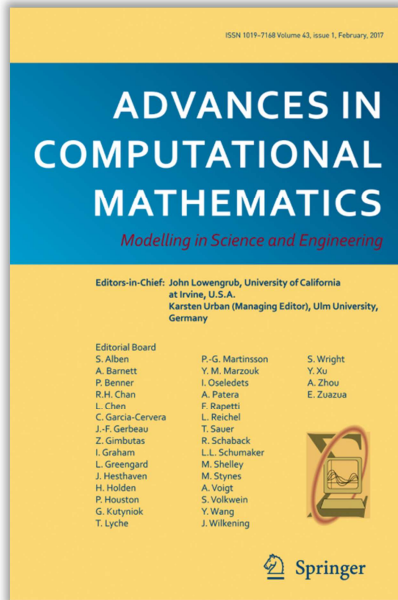


Call for Papers

Advances in Computational Mathematics (ACOM)

Special Issue: *Model Reduction of Complex Dynamical Systems (MODRED)*



In the last two decades, model order reduction (MOR) has become a ubiquitous tool in the Computational Engineering Sciences, with the mathematical theory often lacking behind. Reduced-order models of high-fidelity dynamical systems often serve as surrogates in numerical computations, accelerating transient simulations, frequency response analysis, control and optimization, and sometimes even enabling such computations.

The workshop series **Model Reduction of Complex Dynamical Systems (MODRED)** was established 2010 with a first workshop held at TU Berlin, continued with its second edition at the Max Planck Institute for Dynamics of Complex Technical Systems in Magdeburg and the 3rd workshop "MODRED 2017" at the University of Southern Denmark, Odense.

Its focus is on new methods, and in particular also on mathematical foundations, of MOR methods and techniques.

Deadlines:

Submission deadline.....31 May 2017

Expected finalization of issue.....15 Mar. 2018

Guest Editors:

Peter Benner (chair)	Max Planck Institute for Dynamics of Complex Technical Systems, Magdeburg
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For Submission:

Visit the following web address and select "SI: MODRED" upon submission:

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Topics include, but are not limited to:

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 - System-theoretic methods
 - Rational interpolation
 - POD and reduced basis methods
- Data-driven methods
 - Vector fitting
 - Loewner framework
- Surrogate modeling for design and optimization
- Model reduction methods in applications
 - Structural mechanics
 - Fluid dynamics
 - Control of PDEs
 - Network systems



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