

An ECCOMAS Thematic Conference

This workshop is one of the Thematic Conferences of the European Community in Computational Methods in Applied Sciences (ECCOMAS). For further information on ECCOMAS, visit: www.eccomas.org

It is also an IACM Special Interest Conference. More information about IACM at: www.iacm.info

Registration fees

The registration fees for attendees (including proceedings, lunches, coffee breaks, and banquet) with early registration applicable if received before **July 1st, 2023** are:

	Early	Late
Delegates	500 €	575 €
Students	350 €	425 €

ECCOMAS members will have a 5% reduction on the fee.

Correspondance and registration

All queries concerning the scientific program should be sent by email (with subject: MORTech 2023) to:

David Néron david.neron@ens-paris-saclay.fr

For registration, contact the workshop secretariat:

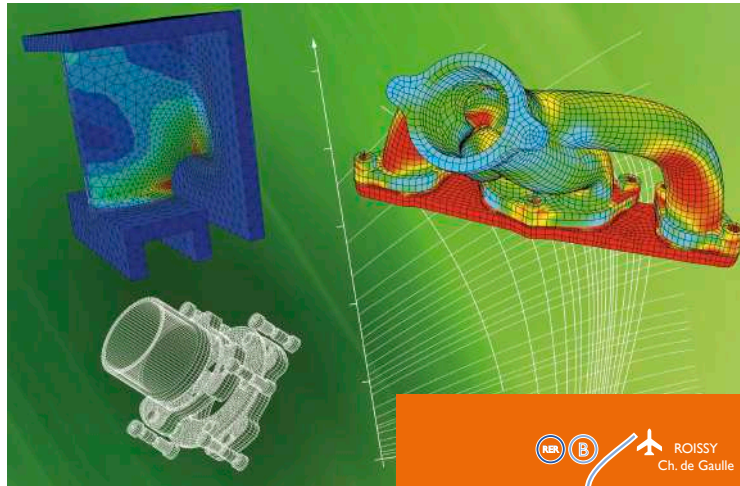
Charlene Marche, mortech2023@sciencesconf.org
LMPS, 4 avenue des Sciences, 91190 Gif-sur-Yvette, France
phone: (33) 1 81 87 51 41

or go to the website of the workshop:

mortech2023.sciencesconf.org

Location and accommodation

The conference will take place in the new building of École normale supérieure Paris-Saclay (ENS Paris-Saclay, formerly Caen), which is now located in the heart of the Université Paris-Saclay, south of Paris. Born of the combined will of universities, grandes écoles, and research organizations, Université Paris-Saclay is one of the leading European and world universities, covering the sectors of Science and Engineering, Life Sciences and Health, and Humanities and Social Sciences.



The campus of Université Paris-Saclay proposes various accommodation facilities. But Paris also offers many hotels at various rates. All hotel reservations are to be made by the participants themselves.



ECCOMAS
European Community on
Computational Methods in
Applied Sciences

6th International Workshop on Model Reduction Techniques

MORTech 2023

France - November 22-24, 2023

An IACM Special Interest Conference



MORTech 2023 | mortech2023.sciencesconf.org

Supporting organizations



Co-organized by





MORTech 2023 | 6th International Workshop on Model Reduction Techniques

Scope

After Cachan (2011, 2015), Blois (2013), Sevilla (2017), and Paris (2019), a new workshop is organized in 2023, devoted to recent advances in model reduction techniques and their impact on computational and prediction sciences, especially (but not only) in mechanical engineering.

Mechanics, like many other domains, keep supplying numerous engineering problems which remain intractable today despite the impressive progress of computational simulation techniques. Model reduction methods are leading to a new generation of high-performance computational tools that provide solutions to engineering problems inaccessible to standard codes based on classical and well-established numerical techniques. For the last years, this is a real breakthrough with many applications.

The workshop will focus on recent developments in model reduction approaches (Reduced Basis, Proper Orthogonal Decomposition, Proper Generalized Decomposition ...) for the numerical solution of models involving partial differential equations. Many methods are now mature and allow the treatment of actual applications in engineering. And obviously, data science is opening new doors that will further transform the approaches in the future.

The workshop is intended to be a meeting ground for the various contributors, including mechanicians, applied mathematicians, and other researchers and engineers involved in testing and computation, to foster the cross-fertilization of ideas and their synergy.

Main topics

- Model order reduction
- Data-based and data-driven approaches
- Real-time simulation: control, optimization, design, ...
- Parametrized problems
- Surrogate modeling, and meta-modeling
- Digital twins
- Convergence, verification and adaptive approaches
- Uncertainty quantification and propagation
- Nonlinear, multiscale and multiphysics problems
- Non-invasive approaches
- Engineering and scientific applications

Chairmen

D. Néron
F. Chinesta
P. Ladevèze

LMPS, ENS Paris-Saclay
PIMM, ENSAM Paris
LMPS, ENS Paris-Saclay

Local organizing and scientific committee

F. Amlani, P.-A. Boucard, L. Chamoin, P.-A. Guidault, P. Ladevèze, D. Néron, Ronan Scanff (LMPS, ENS Paris-Saclay), Andrea Barbarulo (LMPS, Centrale Paris-Saclay), F. Chinesta (PIMM, ENSAM Paris).

Advisory scientific committee

S. Andrieux	ONERA
E. Cueto	Universidad de Zaragoza
Ch. Farhat	Stanford University
F. Feyel	SAFRAN
A. Huerta	Universitat Politècnica de Catalunya
S. Idelsohn	Universitat Politècnica de Catalunya
Y. Maday	Sorbonne Université
H. Matthies	Technical University of Braunschweig
S. Reese	Aachen University
G. Rozza	International School for Advanced Studies, SISSA
K. Willcox	University of Texas at Austin

Speakers and attendees

The program includes **invited talks from industry and academia specialists** aiming to define the state-of-the-art and new needs and opportunities. As for the other editions, to keep the convivial spirit, we would like to limit the number of parallel sessions to the maximum (half of the workshop with plenaries and the other half with 2 parallel sessions). Some time slots will be devoted to discussions. **Spontaneous submissions for presentations or posters are also welcome.**

Abstract submission

Spontaneous propositions of communication must be made as soon as possible on the **website of the conference**. The deadline to submit the final version of the abstract is fixed at **June 1st, 2023**.