# How to register and submit contributions

Authors are invited to submit individual contributions on any of the conference topics. Submissions and conference registration should be performed electronically via the conference website:

https://sim-am2025.cimne.com

# **Supporting Organizations**

- · University of Pavia, Italy
- International Centre for Numerical Methods in Engineering (CIMNE)
- European Community on Computational Methods in Applied Sciences (ECCOMAS)

# **ECCOMAS and IACM Support**

SIM-AM 2025 is a Thematic Conference of the European Community on Computational Methods in Applied Sciences (ECCOMAS), www.eccomas.org

SIM-AM 2025 is a Special Interest Conference of the International Association for Computational Mechanics (IACM). www.iacm.info



#### Location

Sim-AM 2025 will take place at the University of Pavia, Italy.

Pavia, called Ticinum in antiquity, is situated in south-western Lombardy, 35 km south of Milan on the lower Ticino river near its confluence with the Po. Steeped in history, the city was the capital of the Ostrogothic Kingdom (540-553), of the Kingdom of the Lombards (572-774), of the Kingdom of Italy (774-1024) and the seat of the Visconti court (1365-1413).

The University of Pavia was founded in 1361 and offers degree courses in all fields of study. The city campus provides a friendly and dynamic atmosphere for students, academics, and visitors.

Due to its long history, Pavia possesses tremendous artistic and cultural treasures, including important churches and museums, as well as the well-known Certosa di Pavia (5 km north of Pavia).

# **Preliminary Registration Fees**

ORDINARY FEES (in Euros)	Early fees If paid before June 16, 2025	Late Fees If paid on or after June 16, 2025
Delegates	650 €	750 €
Students	450 €	550€
Social Program for Accompanying Persons (Includes welcome cocktail and conference banquet)		100€

ECCOMAS and IACM members will have a 5% reduction on the delegate fees.

Registration fee include: conference proceedings, attendance at the scientific sessions, coffee breaks, lunches, welcome cocktail and social banquet.

## **Conference Secretariat**

sim-am\_sec@cimne.upc.edu Tel. +34 93 405 46 96

## CIMNE Congress Bureau

UPC North Campus, Building C1 - Office C4 C/Gran Capità, S/N 08034 Barcelona, Spain

## **CIMNE®**

International Centre for Numerical Methods in Engineering

# Sim-AM 2025

V International Conference on Simulation for Additive Manufacturing

# 9-11 September 2025, Pavia, Italy









https://sim-am2025.cimne.com

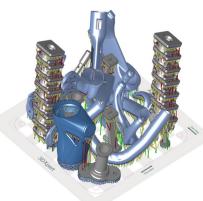
# **Objectives**

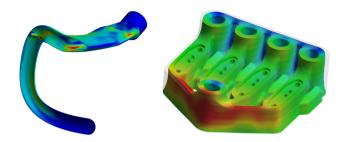
The Fifth International Conference on Simulation for Additive Manufacturing (Sim-AM 2025) will be organized in Pavia, Italy, from September 9-11, 2025. The previous conferences were held in Munich, Germany, on 11-13 October, 2017, Pavia, Italy, on 11-13 September 2019, online from 31 August - 2 September 2021 and Munich, Germany, on 26-28 July, 2023

Additive manufacturing (AM) is evolving as one of the most promising manufacturing technologies for creating solid structures of virtually any shape. AM can produce more complex shapes than those obtained through classical manufacturing techniques. As a consequence, areas of engineering applications for AM products include design models, lightweight components for the automotive or aerospace industry, patient-specific medical implants, civil engineering structural and/or architectural components.

AM presents new challenges for numerical simulations, computational modeling and design optimization of the involved products and processes. While products obtained by innovative design approaches through a real shape and/or topology optimization have the potential to revolutionize the market, their design is significantly more complicated than for classic manufacturing techniques. Additionally AM processes involve multi-physics and multi-scale phenomena. The relevant spatial scales range over many orders of magnitude, and important time scales start at microseconds for physical processes and reach to hours or even days. The involved physics often include mechanical, thermal, and phase change problems.

Finally, validation and verification are clearly essential steps to accelerate the transformation of AM into an integrated design to manufacturing tool.





# **Conference Chairmen**

#### Ferdinando Auricchio

University of Pavia, Italy

#### **Ernst Rank**

Technical University of Munich, Germany

#### **Paul Steinmann**

University of Erlangen-Nuremberg, Germany

## Stefan Kollmannsberger

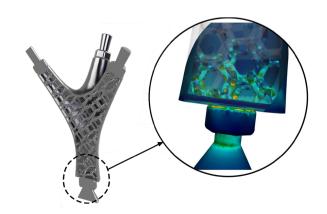
Bauhaus University of Weimar, Germany

## Simone Morganti

University of Pavia, Italy

### Andrew McBride

University of Glasgow, United Kingdom



# **Local Organizing Committee**

Gianluca Alaimo

Ferdinando Auricchio

Massimo Carraturo

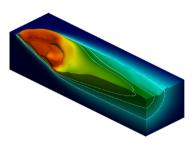
Michele Conti

Stefania Marconi

Marta Molinari

Simone Morganti

Maddalena Ravasi



# **Conference Topics**

- AM process simulation
- · Design for AM
- Topology optimization
- Industrial applications
- Novel alloys for AM
- Scale bridging characterization
- Process-structureproperty-performance relationships
- Fatigue of AM components

- Experimental validation
- Microstructural characterization
- Innovative measuring techniques
- Data-driven analysis
- Volumetric AM
- Civil engineering AM construction
- Bioprinting
- AM in Medicine

# **Important Dates**

Deadline for presenting a one page abstract	April 7th, 2025
Acceptance of the contributions	May 26th, 2025
Deadline for early payment and for speaker registration(*)	June 16th, 2025

(\*) Speakers are required to finalize their registration before June 16th, 2025 in order to get the presentation included in the Conference Programme.