SIM-AM 2019

11-13 September 2019, Pavia, Italy

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:

http://congress.cimne.com/sim-am2019

Conference Secretariat

CIMNE

International Centre for Numerical Methods in Engineering

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Location

The II International Conference on Simulation for Additive Manufacturing - Sim-AM 2019 will take place in Pavia, Italy, at the University of Pavia.

The main building of the University of Pavia (Corso Strada Nuova, 65 – 27100 Pavia) is located in a pedestrian area and can be reached by taxi or Bus Line 3 from the railway station

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, and is the capital of a fertile province essentially devoted to agriculture (wine, rice, cereals, dairy products).

Preliminary Registration Fees

	Early fees If paid before June 10, 2019	Late Fees If paid on or after June 10, 2019
Delegates	550 €	650 €
Students	350 €	450 €
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.

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 2019 is a Thematic Conference of the European Community in Computational Methods in Applied Sciences (ECCOMAS). www.eccomas.org

SIM-AM 2019 is a Special Interest Conference of the International Association for Computational Mechanics (IACM). www.iacm.info

Sim-AM 2019

II International Conference on Simulation for Additive Manufacturing

11–13 September 2019, Pavia, Italy

ECCOMAS Thematic Conference

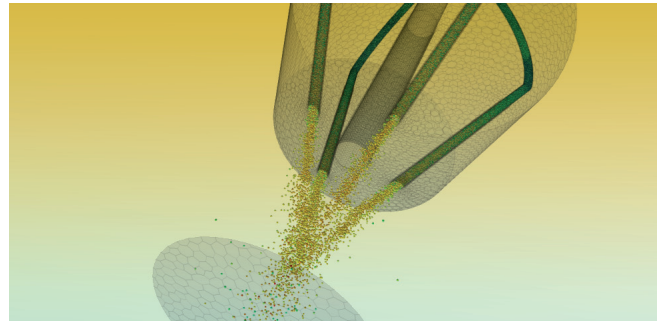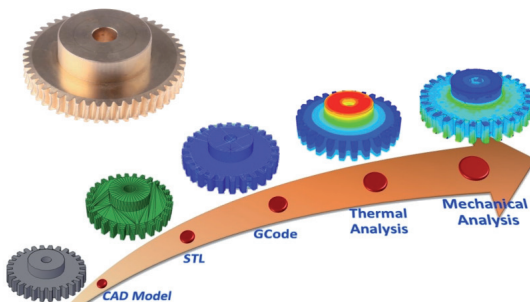iacm Special Interest Conference

UNIVERSITÀ DI PAVIA

Objectives

The Second International Conference on Simulation for Additive Manufacturing (Sim-AM 2019) will be organized in Pavia, Italy, on 11-13 September 2019. The first edition of this conference was held in Munich, Germany in 2017 and attracted more than 170 participants.

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

All these aspects clearly raise new questions for numerical simulations, computational models and design optimizations 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 itself is much more complicated than for classic manufacturing techniques. Additionally AM Processes involve multi-physics and multi-scale phenomena. Whereas relevant spatial scales range over many orders of magnitude, 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.
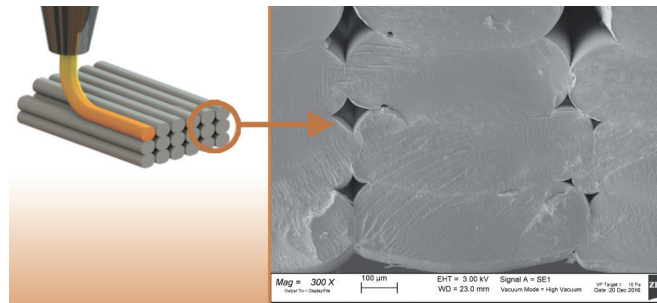
Conference Chairmen

Ferdinando Auricchio
University of Pavia
Department of Civil Engineering and Architecture
Pavia, Italy

Ernst Rank
Technical University of Munich
Institute for Advanced Study
Munich, Germany

Paul Steinmann
University of Erlangen-Nuremberg
Chair of Applied Mechanics
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Stefan Kollmannsberger
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Chair of Simulation in Applied Mechanics
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Simone Morganti (Secretary)
University of Pavia
Department of Civil Engineering and Architecture
Pavia, Italy

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Laura Mazzocchi, University of Pavia, Pavia, Italy
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Conference Topics

- CAD to part chain
- Innovative application
- Material modeling
- Multi-physics and multi-scale simulation
- Shape and topology optimization
- Simulation for different AM technologies (fused deposition, laser based methods, ...)
- Validation and verification

Important Dates

Deadline for presenting a one page abstract	April 8, 2019
Acceptance of the contributions	May 7, 2019
Deadline for early payment and for speaker registration(*)	June 10, 2019

(*) Presenting authors are required to finalize their registration before June 10, 2019 in order to get the presentation included in the Conference Programme.