

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-am2027.cimne.com>

Supporting Organizations

- Bauhaus-Universität Weimar, Germany
- International Centre for Numerical Methods in Engineering (CIMNE)
- European Community on Computational Methods in Applied Sciences (ECCOMAS)

ECCOMAS and IACM Support

Sim-AM 2027 is a Thematic Conference of the European Community on Computational Methods in Applied Sciences. www.eccomas.org

Sim-AM 2027 is a Special Interest Conference of the International Association for Computational Mechanics. www.iacm.info



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Location

Sim-AM 2027 will take place at the Bauhaus-Universität, located in the picturesque town of Weimar, in central Germany.

Weimar developed from a prehistoric settlement about 230,000 years ago into one of the most influential cultural centers. Prominent figures who shaped an entire era during their time in Weimar include the writers Goethe and Schiller, as well as the composers Bach and Liszt. Weimar is also known as a focal point of political change and hosted the first national assembly that drafted the first German democratic constitution, giving the Weimar Republic its name.

In the early 20th century, the Bauhaus-Universität in Weimar revolutionized modern design and architecture. The spirit of Gropius, Klee, Kandinsky, and many others continues to inspire us today to pursue new interpretations of modern functionalism that integrate form, material and function.

Preliminary Registration Fees

ORDINARY FEES (in Euros)	Early fees (If paid before) June 20, 2027	Late Fees (If paid on or after) June 20, 2027
Delegates	690 €	790 €
Students	535 €	635 €
Social Program for Accompanying Persons (Includes welcome cocktail and conference banquet)		140 €

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

Delegate registration fee includes: conference proceedings, attendance the scientific sessions, coffee breaks, lunches, welcome cocktail and social banquet. (*) Student registration fee does not include social banquet. The social banquet can be purchased by paying an additional fee of 120€.

Conference Secretariat

sim-am_sec@cimne.upc.edu
Tel. +34 93 405 46 96

CIMNE Congress Bureau

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

CIMNE[®]

International Centre for Numerical Methods in Engineering

Sim-AM 2027

VI International Conference on
Simulation for Additive Manufacturing

13- 16 September 2027, Weimar, Germany



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<https://sim-am2027.cimne.com>

Objectives

The main objective is to bring together and provide a forum for discussions among researchers as well as industry interested in the computational design, analysis and optimization of processes and products of any kind of additive manufacturing technology.

Additive manufacturing (AM) is 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 increase individualization, efficiency, and functionalization, their design is significantly more complicated than for classic manufacturing techniques. Additionally, AM production 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 as well as evaporation, surface tension and fluid-flow.

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

Massimo Carraturo

University of Pavia, Italy

Simone Morganti

University of Pavia, Italy

Stefan Kollmannsberger

Bauhaus Universität Weimar, Germany

Philipp Kopp

Bauhaus Universität Weimar, Germany

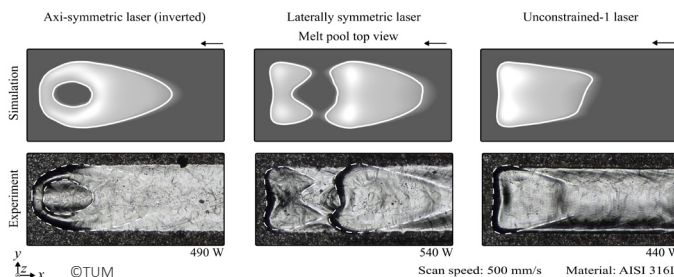
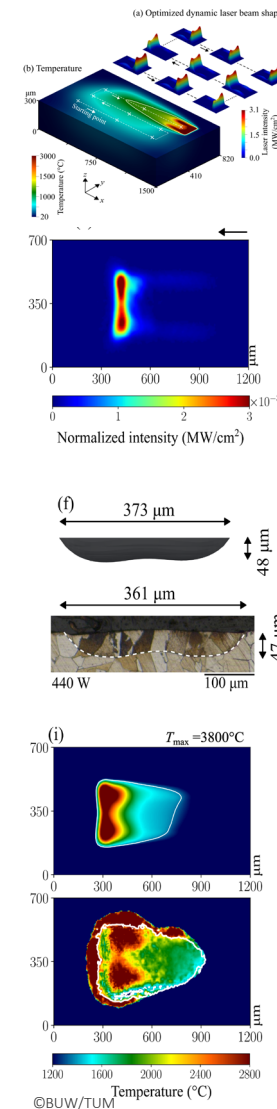
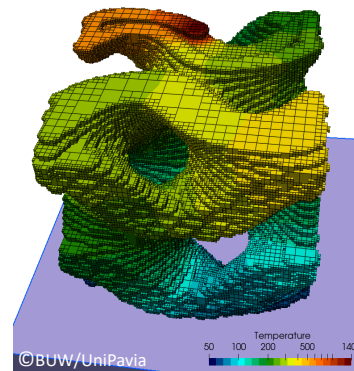
Niels Aage

Technical University of Denmark, Denmark

Honorary Chairman

Ernst Rank

Technical University of Munich, Germany



Local Organizing Committee

Matti Cristmann

Bauhaus Universität Weimar, Germany

Stefan Kollmannsberger

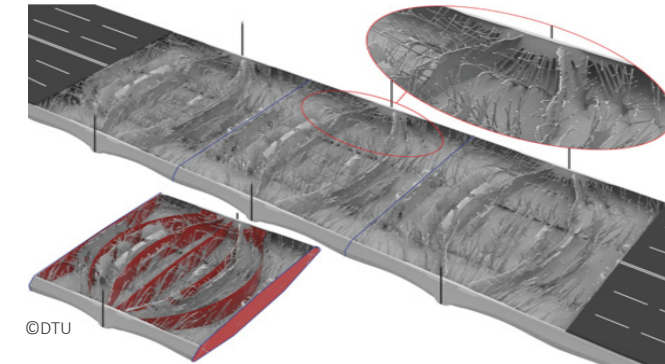
Technical University of Munich, Germany

Philipp Kopp

Bauhaus Universität Weimar, Germany

Tom Lahmer

Bauhaus Universität Weimar, Germany



Conference Topics

- AM process simulation
- Design for AM
- Topology optimization
- Industrial applications
- Novel alloys for AM
- Scale bridging characterization
- Process-structure-property-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 11th, 2027
Acceptance of the contributions	May 30th, 2027
Deadline for early payment and for speaker registration(**)	June 20th, 2027

(**) Speakers are required to finalize their registration before June 16th, 2027 in order to get the presentation included in the Conference Programme.

