ECCOMAS:
European Community
on Computational Methods
in Applied Sciences

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ECCOMAS Thematic Conference

Industry Interest Group ECCOMAS

CM3 - TRANSPORT 2025

Technologies for smart and sustainable transport systems

Trieste, Italy, 24th - 26th September 2025

cm3-2025.cira.it

Conference Objectives

This conference on Design in Transport is motivated, by the urgency to address climate change, to design innovative solutions related to transport and energy using new digitalized optimization methods and tools. The integration of Artificial Intelligence (AI) tools into advanced multi-disciplinary simulation, optimization, and big data analysis is expected to significantly impact systemic procedures in industrial processes and various aspects of modern societies, such as mobility. Multi-disciplinary scientific computing is becoming one of the powerful design instruments used both in academic research and industrial innovations. The challenge of the conference is to increase digitalization procedures change design optimization methods, tools and technologies, targeting new greener transport in the world.

CM3 – Computational Multi-Physics, Multi-Scales and Multi Big Data

CM3 – Computational Multi-Physics, Multi-Scales and Multi Big Data offer new opportunities for innovative optimization methods supported by AI (e. g., machine or deep learning, digital twins). CM3 enables innovative design processes in the industry and research community in view of the ambitious goal of zero or low-emission future transport systems. Novel design concepts include full electric and hybrid-electric solutions, green hydrogen or low carbon fuel-powered aviation and surface transport means, advanced transport and logistic system architectures, including autonomously operating vehicles.

Conference Topics

Areas of application are:

- **Transport Systems**
- **Aviation**
- **Automotive**
- **Maritime**
- **Urban transport**
- **Logistics**
- **Energy efficiency**
- **Full electric and hybrid-electric solutions**
- **Green Hydrogen**
- **Low-carbon fuel-powered architectures**
- **Materials and manufacturing**
- **MDO** (aero-acoustics, aero-elastic,…)
- **Education**

Conference topics of computational methods:

- **Modelling**
- **Simulation**
- **Optimization**
- **Uncertainty**
- **Quantification**
- **Data-Driven Computing**
- **Neural Networks**
- **Machine Learning (AI)**
- **Industrial Computing**
- **Digital twins**
- **Validation**

Conference Address

Conference Hall at Area Science Park, Padriciano 99, Trieste, Italy

Web: areasciencepark.it/facilty-e-servizi/centro-congressi/

Local Organizers

Silvia Cefalo, *ESTECO, Italy*

Email: cm3-secretariat@cira.it

Supported by

ECCOMAS Industry Interest Group (IIG)

The ECCOMAS IIG aims linking the interest of industry in innovative computational methods with the research communities. IIG is organizing this thematic conference, which focuses on green design challenges of aviation and the different surface transport modes. It will provide answers to the opportunities of digitalization for green design and present examples of innovative design solutions. This is the sixth event in the series of ECCOMAS Thematic events on CM3 and will be hosted by the University of Triest and CIRA

Important Dates 2025

MS/STS Submission deadline	05 may
Paper Submission deadline (one page abstract)	15 may
Notification of acceptance	01 june
Early bird registration	15 june
Registration deadline	07 sept
Conference	24 - 26 Sept

Registration Fees

	Standard rate	Early bird rate
Participant	620 €	500 €
On site registration (conference dinner not guaranteed)	680 €	
Student	300 €	250 €
Session organizers (Mini-symposium of 4 contributions)	300 €	250 €
Accompanying person	100 €	100 €

Call for Papers

The paper authors are kindly requested to submit the title and a one-page abstract on the conference topics (see list) before the given deadline by using the Abstract Submission Form on the conference website within 15th May 2025.

Call for organising a Mini-Symposium (MS) or a Special Technology Sessions (STS)

MS and STS cover one or several conference topics (see list) and are typically composed by four papers. A MS addresses novel methods and tools of more upstream nature, while STS tackle special innovative technologies with an industrial interest. The organisers of a MS or a STS choose the contributing papers of the session.

The organisers are kindly invited to submit the title and a one-page abstract of the planned MS or STS together with working titles of the contributing papers before the given deadline by using the Abstract Submission Form on the conference website https://cm3-2025.cira.it/ within 5th May 2025.