


# MecaNano General Meeting 2026

Connect with leading researchers in the **European Network for the Mechanics of Matter at the Nano-Scale**, and explore cutting-edge advances in small-scale mechanics, nanomechanical testing, multiscale modelling, and machine learning for materials science.

Join us  
27 – 29 April 2026

 *Rome, Italy –  
Università degli  
Studi Roma Tre*

 **Roma Tre**

# ROME

Register Now!



# Invited Speakers



**Prof. Verena Maier-Kiener**

Montanuniversität Leoben, Austria

*Linking Nanoscale Phase Transformations to High-Temperature Mechanical Behavior*



**Dr. Brad L. Boyce**

Sandia National Laboratories, USA

*Fatigue, deformation and failure of materials at the nanoscale*



**Prof. Thomas Pardoen**

UCLouvain, Belgium

*Fracture mechanics from nano- to macro-scales*



**Prof. Nathan Mara**

University of Minnesota, USA

*Nanoscale structure–property relations in extreme environments*



**Dr. Julien Guénoles**

CNRS, France

*Atomistic modelling and data-driven multiscale mechanics*



**Prof. Marco Sebastiani**

Università degli Studi Roma Tre, Italy

*High-speed nanoindentation mapping*



**Dr. Claus O. W. Trost**

Austrian Academy of Sciences, Austria

*Explainable machine learning for nanoindentation and materials data*



**Dr. Jakob König**

KAI Competence Center (Infineon), Austria

*FAIR data, large-scale analytics and digital workflows for materials science*



Funded by the  
European Union



**Info & registration:**

<https://mecanano2026.sciencesconf.org/>

# Venue



The Final MecaNano General Meeting 2026 will take place in **Rome, Italy**, from **27 to 29 April 2026**, uniting international researchers and practitioners in nanoscale mechanics for three days of scientific exchange and collaboration.




# Dinner

Angelineria  
Via Galvani 24, Roma

Tuesday, 28/04  
Starting from 19:30



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## Monday

27 Apr 2026

13:00	Welcome reception · 60 min
14:00	Opening remarks · Edoardo Rossi, Marco Sebastiani · 10 min
14:10	Advanced Nanoindentation <b>Marco Sebastiani · 30 min</b> High-speed nanoindentation mapping
14:40–15:40	Advanced Nanoindentation
15:40	Coffee break · 30 min
16:10	<b>Verena Maier-Kiener · 30 min</b> Linking Nanoscale Phase Transformations to High-Temperature Mechanical Behavior
16:40–18:00	Session: Microstructure-Driven Small-Scale Mechanics
18:00	Closing remarks · Edoardo Rossi, Marco Sebastiani · 10 min

## Tuesday

28 Apr 2026

09:00	Welcome reception · 10 min
09:10	<b>Brad Boyce · 30 min</b> Mitigating fatigue failure at the nanoscale
09:40–10:40	Session: Nanoscale Mechanical Behavior: Fatigue, Indentation & Tribology
10:40	Coffee break · 30 min
11:10	<b>Thomas Pardeon · 30 min</b> Fracture toughness at nanoscale: experimental challenges and physical meaning
11:40–13:00	Session: Nanoscale Fracture and Small-Scale Plasticity
13:00	Lunch break · 80 min
14:20	<b>Nathan Mara · 30 min</b> Structure-Mechanical Property Correlations in Pharmaceutical Crystals
14:50–15:50	Session: Structure–Property Correlations: Microstructure, Deformation & In Situ Probes
15:50	Remarks on dinner place and posters · 10 min
16:10	Poster session (with coffee break) · 110 min

## Wednesday

29 Apr 2026

08:50	Welcome reception · 10 min
09:00	<b>Julien Guérolé · 30 min</b> Atomic-Scale Informed Dislocation Density Fields for Interface-Dominated Nanomechanics
09:30–10:50	Session: Atomistic-to-Multiscale Nanomechanics
10:50	Coffee break · 30 min
11:20	FAIR Data and Scalable Machine Learning for Mechanics <b>Jakob Koenig · 30 min</b> Bridging Industry and Academia: A Practical Approach to FAIR Data Management
11:50	FAIR Data and Scalable Machine Learning for Mechanics <b>Claus O. W. Trost · 30 min</b> Using explainable machine learning to learn from nanoindentation mapping – Should we use more features?
12:20–13:20	Session: FAIR Data and Scalable Machine Learning for Mechanics
13:20	Closing remarks · Benoit Merle, Edoardo Rossi · 10 min



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