

# VENUE

The Italian city selected to host Compumag 2025 is Naples, one of the most ancient Italian towns. Naples is full of history, dating back to Roman Empire (whose ruins are visible in Pompei and Ercolano like nowhere else in the world) until more recent arts and culture flourishing in the 21st century. Natural landscapes surrounding the city present breath-taking views, including the Vesuvius volcano, the Amalfi and Sorrento Coasts, and the islands of Capri and Ischia. Naples is a large town, and as such full of life and tourism. It is becoming more and more hospital to foreigners, as reported in many independent sites dedicated to travel.

The venue is in a pedestrian area in the heart of Naples, in front of the fishermen's harbor, Santa Lucia. The area is a lively part of the city, full of life, and forbidden to vehicle traffic.

### CONNECTIONS

Regional airport: Naples Capodichino (NAP), Intercontinental hub: Rome Fiumicino (FCO)

# 25th International Conference on the Computation of Electromagnetic Fields

### WELCOME!

**COMPUMAG 2025**, the **25° International Conference on the Computation of Electromagnetic Fields**, will be held in Naples, Italy, from June 22 to 26, 2025. It is co-organized by 9 teams from the Italian community of Computational Electromagnetism. The conference venue is the Hotel Royal Continental, located in the heart of Naples.

Since its creation in 1976, COMPUMAG has been one of the most important events in the field of computational electromagnetics for researchers all over the world to present their latest research advances, to share professional experiences, to exchange new ideas and to expand their professional networks.

Following this well established tradition, the aim of to discuss COMPUMAG 2025 is recent developments and practical applications in the numerical computation of electromagnetic fields for engineers and physicists engaged in the design and analysis of electromagnetic devices and systems. Reflecting the new trends and rapid progress in the field of topics listed inside, authors worldwide are invited to submit original and previously unpublished contributions. With your valuable contribution and active participation, we believe that you will benefit from the excellent quality of technical presentations, have fruitful discussions, experience pleasant moments by meeting friends and establishing new scientific relationships, and have an enjoyable stay in Naples.





On behalf of the board of International Compumag Society, the organizing committee and the editorial board, we sincerely welcome you to Naples to attend the COMPUMAG 2025. We will commit to making this event pleasant for every attendant and accompanying persons, during and apart of the scientific sessions. We are organizing an exciting social program to make Compumag 2025 a really enjoyable event.



## **INFORMATIONS AND CONTACT**

Email: secretariat@compumag2025.com Website: www.compumag2025.com Location: Hotel Royal Continental, Via Partenope, 38, Napoli (Italy)



## **CONFERENCE ORGANIZERS**

General Chair:Alessandro FormisanoCo-Chairs:Sami Barmada, Maurizio RepettoScientificGuido Ala, Piergiorgio Alotto,secretariat:Ermanno Cardelli, Luca Di RienzoChair of LocalMassimiliano d'AquinoOrganizing Committee:

### **CONFERENCE EDITORIAL BOARD CHAIRS**

**Chair**: Zhuoxiang Ren (Sorbonne Univ., France) **Co-chair**: Paolo Di Barba (Univ. of Pavia, Italy)

## **EXHIBITION & ROUND TABLES**

Exhibitions and other events on computational electromagnetics software, AI and VR tools, and scientific instruments for electromagnetic testing and validation will be held during the Conference. The objective is to give the participants the opportunity to be acquainted with the latest innovations offered by state-of-the-art products available on the market. Potential exhibitors are cordially asked to contact the organizer for further information or refer to the COMPUMAG2025 website providing the details of the different events.

#### **YOUNG RESEARCHERS OPPORTUNITIES**

The COMPUMAG 2025 intends to encourage participation of Ph. D. students or young scientists and to promote the presentation of outstanding papers submitted by students, especially those affiliated with institutions having limited financial means. For this reason, a number of students will be sponsored by free participation or by significantly reduced registration fees. Depending on the quality of the submitted short papers, up to 10 student participants are planned to be sponsored.

In addition, the Rita Trowbridge award will be assigned as an appreciation to the best poster or oral presentation from a young researcher.

### INTERNATIONAL COMPUMAG SOCIETY BOARD

### David Lowther (Canada, President) Jan Sykulski (UK, Secretary/Treasurer)

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## **IMPORTANT DATES**

Submission of digest (2-page): December 21, 2024 Notification of acceptance: March 15, 2025 Early bird registration: May 1, 2025 Final date for paper registration: June 22, 2025 Submission of extended paper for IEEE TMAG publication: July 10, 2025

# **TOPICS**

#### A.Theoretical Aspects:

- 1. Mathematical Modelling and Formulations
- 2. Static and Quasi-static Fields
- 3. Wave Propagation
- 4. Material Modelling
- 5. Multi Physics and Coupled Problems
- 6. Education

#### **B.Methodologies:**

- 1. Optimization and Design
- 2. Numerical Techniques
- 3. Machine Learning and Data-Driven Techniques
- 4. Multi-Scale Modelling and Homogenization
- 5. Software Methodologies
- 6. Quantum Computing

#### **C.Novel Computational Methods in Applications:**

- 1. Antennas and High Frequency Devices
- 2. Electric Machines and Drives
- 3. Electromagnetic Sensors, Sensing and Metrology
- 4. Electromagnetic Compatibility
- 5. Bioelectromagnetics
- 6. Other Electromagnetic Devices and Applications

# **PAPER SUBMISSION**

Authors are required to submit the 2-page short paper in Microsoft Word, Adobe PDF or LaTex format via the ConfTool online submission system at: https://www.conftool.com/compumag2025

Sample Template and more detailed information will be made available on the conference website: <u>http://www.compumag2025.com</u>

Please note that the 2-page short paper submission deadline is December, 21st 2024. The authors of the accepted short papers will be invited to present their research work at the COMPUMAG 2025 by oral or poster presentations, and to submit full papers for possible publication in an issue of IEEE Transactions on Magnetics through the peerreviewing process.