International Workshop

Joint Workshop of ENBIS and EMN Mathmet

Mathematical and Statistical Methods for Metrology
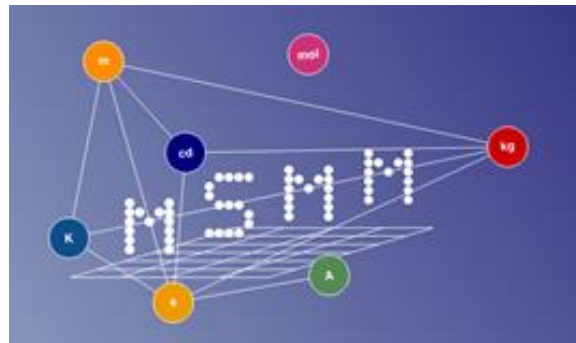
30 - 31 May, 2023

INRIM, Torino, Italy

Based on the success of the previous editions (**MSMM 2019** and **MSMM 2021**) and the strong collaboration between the **European Network for Business and Industrial Statistics** (**ENBIS**) and the **European Metrology Network (EMN) for Mathematics and Statistics** (**Mathmet**), ENBIS and Mathmet are jointly organizing the third edition of the **Mathematical and Statistical Methods for Metrology Workshop (MSMM 2023)**, under the local organization of **INRIM** and **Politecnico di Torino**.

The workshop will be held as an **in-person** event, at the INRIM campus (Torino, Italy), on the 30th and 31st of May 2023.

Its main aim is to transfer the state-of-the-art modelling and computational tools to industry, testing and calibration laboratories, academia and other client communities, and, at the same time, to collect their needs and ideas for future improvements of the mathematical and statistical methods for their fields of application.

Highlights of the Workshop include invited talks, as well as plenary, specialized, contributed and poster sessions concerning the main topics of Mathematics and Statistics for metrological applications.

Session topics include but are not limited to:

- Uncertainty and measurement quality evaluation
- Regression and inverse models
- Interlaboratory data evaluation

- High dimensional, dynamic and complex models

- Bayesian models

- Simulations and virtual experiments, computational methods and digital twins

- Artificial Intelligence, Machine Learning, Big Data analytics

- Statistical engineering

- Data and software reliability

- Design of experiments, sampling and sequential design

- Digitalization in Metrology

- Time series analysis

- Conformity assessment, reliability and quality control

- Chemometrics

- Biostatistics

Introductory sessions will be dedicated to the presentation of the mission and main recent activities conducted by **ENBIS** and **MATHMET**, respectively, in order to foster collaborative interactions between the two bodies.

Specialized sessions on specific applications, case studies and needs from industry, health sector, environmental compartment, etc., are very welcome to be included in the programme, with the aim to strengthen the connections between mathematical and statistical experts from the metrological community and the practitioners at companies, laboratories and other bodies. If you wish to propose an organized session, please do not hesitate to contact f.pennecchi@inrim.it and antonio.pievatolo@mi.imati.cnr.it.

Young researchers are strongly encouraged to attend the conference for nurturing scientific and professional interactions at lower registration fees.

Instructions on when and how to submit the abstracts, as well as details on registration, travel and accommodation will be published soon on the Workshop website. For the moment, we kindly ask you to save the following dates:

- **3 March 2023** – deadline for submission of a title and an extended abstract (max 2 pages)
- **17 April 2023** – acceptance notification to the authors
- **3 May 2023** – last date for the payment of the early registration fee: standard € 180 / reduced for PhD students € 120. After this date the fees will be: standard € 250 / reduced € 150
- **30 - 31 May 2023** – Workshop at the INRIM campus

Queries can be addressed to Francesca Pennecchi (f.pennecchi@inrim.it) or Antonio Pievatolo (antonio.pievatolo@mi.imati.cnr.it), chairs of the Workshop. On behalf of ENBIS and MATHMET, we hope you will join the MSMM 2023 Workshop!

Francesca Pennecchi (INRIM, EMN Mathmet chair, ENBIS) and

Antonio Pievatolo (IMATI-CNR, ENBIS past-president)