













# Metrology for

eXtended Reality, Artificial Intelligence and Neural Engineering

MILANO, ITALY

OCTOBER 25-27, 2023

## CALL FOR PAPERS

The 2023 IEEE International Conference on Metrology for eXtended Reality, Artificial Intelligence, and Neural Engineering (IEEE MetroXRAINE 2022) will be an international event focused in advances in measurement methodologies, measurement systems, instrumentation and sensors and aimed at creating a synergy between experts in eXtended Reality, Brain-Computer Interface, and Artificial Intelligence.

Following the main idea of the 2022 proposal, MetroXRAINE will be configured as an immersive collection of sessions organized by the individual members of the Scientific Committee. Round tables will be held for different projects and hot research topics. In addition to regular papers, many initiatives and opportunities such as industry sessions, exhibits, tutorials, demos, student contests, and others are planned to enhance your experience with the conference, and will make MetroXRAINE 2023 a unique event to meet with people involved eXtended Reality, Artificial Intelligence, and Neural Engineering.

**ONORARY CHAIR** 

Damien Coyle Ulster University, Ireland

**GENERAL CHAIRS** 

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University of Naples Federico II, Italy

Marco Faifer

DEIB - Politecnico di Milano, Italy

DEPLITY CHAIR

Antonio Esposito

University of Naples Federico II, Italy

#### **TOPICS**

- Instrumental solutions and measurement principles for enhancing the accuracy and robustness of XR-BCI systems
- Display technologies and human vision
- Wearable sensors for neuroimaging
- User experience, perception, and interactions in XR and BCI
- Multisensory experiences and improved immersion
- Psychophysical condition monitoring
- Advanced machine learning techniques for XR-BCI
- Deep learning-based classification
- VR-supported mindfulness-based on EEG signals
- Immersive user experience with XR-BCI
- Human-in-the-loop AI
- Bioengineering and rehabilitation
- Biosignal processing
- Law and Ethics

#### **SPECIAL SESSIONS**

Special sessions mostly aimed at creating mini-workshops on specific topics, where researchers working on the same field can meet, familiarize, exchange ideas, and create cooperation.

Special Sessions are being developed by designated chairs.

Special sessions will be organized on specific topics, see online at

https://www.metroxraine.org/special-sessions

### **IMPORTANT DATES**

Special Session Proposal Deadline: January 31, 2023

Abstract submission deadline: March 15, 2023 Full paper submission deadline: April 30, 2023 Full Paper Acceptance Notification: June 15, 2023

Final Paper Submission Deadline: July 31, 2023

www.**metroxraine**.org info metroxraine.org @metroxraine



**#MetroXRAINE 2023**