

7th Workshop on Maximum Entropy and its Applications

WMEA 2025



October 27-28, 2025 | Department of Mathematics | University of Aveiro

The theory of maximum entropy plays an important role in the analysis of ill-posed problems. It is on the foundations of info-metrics, a research area at the intersection of statistics, computer science and information theory. The workshop brings together students and researchers from diverse fields of science to foster discussion and interdisciplinarity on modelling and inference using maximum entropy.

Monday, October 27

Opening Session [Room 11.1.32] [Includes morning coffee]

08:45 – 09:15 **José Alexandre Almeida**, Director of the Department of Mathematics
Delfim Torres, Coordinator of the Center for Research and Development in Mathematics and Applications (CIDMA)
Adelaide Freitas, Coordinator of the Probability and Statistics Group from CIDMA

Tutorial [Room 11.1.32]

09:15 – 09:45 **Pedro Macedo**, University of Aveiro
A Brief Introduction to Maximum Entropy Estimation

09:45 – 11:45 **Jorge Cabral**, University of Aveiro
Estimating Linear Models in R: from Ordinary Least Squares to Maximum Entropy via GCestim

Lunch

Plenary Talks [Room Sousa Pinto]

14:00 – 14:40 **Enrico Ciavolino**, University of Salento
Information Theory in Human and Social Sciences

14:40 – 15:20 **Mario Angelelli**, University of Salento
Streaming Generalised Cross Entropy and Its Application to Dynamic Modelling in Psychological Measurement

Coffee Break

15:40 – 16:20 **Serena Arima**, University of Salento
Sanitary Migration in Italy: a Bayesian Information-Based Nonparametric Clustering Approach

16:20 – 17:00 **José C. Príncipe**, University of Florida
Resolving the Exploration-Exploitation Dilemma in RL using the Value of Information

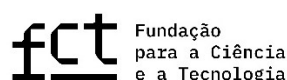
Tuesday, October 28

Open Debate [Room Sousa Pinto]

10:00 – 12:00 **Jorge Cabral**, University of Aveiro
Open Questions and Directions for Future Research, including Artificial Intelligence

Organizers: Ana Helena Tavares, Andreia Dionísio, Elvira Silva, Jorge Cabral, Manuel Nogueira, Maria Conceição Costa, and Pedro Macedo.

Registration is free but required. Registration form is accessible via this [link](#) or the above QR Code. Deadline: October 24, 2025.



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The CO₂ emissions generated by the WMEA 2025 will be offset through United Nations projects.