



**MONTENEGRIN ACADEMY
OF SCIENCES AND ARTS**

DEPARTMENT OF NATURAL SCIENCES
INFORMATION AND COMMUNICATION
TECHNOLOGIES BOARD

SCIENTIFIC MEETING

**SIGNAL PROCESSING
– STATE-OF-THE-ART
AND PERSPECTIVES**

PROGRAMME

MONTENEGRIN ACADEMY OF SCIENCES AND ARTS
RISTA STIJOVIĆA 5, PODGORICA

Tuesday, June 11, 2024

ORGANIZING COMMITTEE:

ACADEMICIAN LJUBIŠA STANKOVIĆ,

Vice-President, Montenegrin Academy of Sciences and Arts

ACADEMICIAN IGOR DJUROVIĆ,

President of the Information and Communication
Technologies Board, Montenegrin Academy
of Sciences and Arts

DOC. DR MILOŠ BRAJOVIĆ,

Faculty of Electrical Engineering,
University of Montenegro

PROGRAMME

9.00–9.10

OPENING ADDRESS:

ACADEMICIAN LJUBIŠA STANKOVIĆ

Vice-President of the Montenegrin Academy
of Sciences and Arts

9.10–10.20

SESSION I

MULTI-SENSOR SYSTEMS

chaired by

IGOR DJUROVIĆ

9.10–9.40

MARIUS PESAVENTO

Technical University of Darmstadt, Germany

**AN OPTIMIZATION PERSPECTIVE
ON STATISTICAL SENSOR
ARRAY PROCESSING**

9.45–10.15

MILOŠ BRAJOVIĆ

University of Montenegro

GRAPH SIGNAL PROCESSING

10.20–10.35

COFFEE BREAK

10.35–11.45

SESSION II

ESTIMATION

chaired by

MILOŠ BRAJOVIĆ

10.35–11.05

FULVIO GINI

University of Pisa, Italy

**MISSPECIFIED LOWER BOUNDS AND
ITS APPLICATION TO INFERENCE
PROBLEMS WITH COMPLEX
ELLIPTICALLY SYMMETRIC
(CES) DISTRIBUTED DATA**

11.10–11.40

IGOR DJUROVIĆ

University of Montenegro, Montenegrin
Academy of Sciences and Arts

**RANSAC ALGORITHM APPLICATION
IN PARAMETER ESTIMATION OF
FREQUENCY MODULATED SIGNALS**

11.45–12.00

COFFEE BREAK

12.00–13.10

SESSION III
ARTIFICIAL INTELLIGENCE
APPLICATIONS

chaired by
LJUBIŠA STANKOVIĆ

12.00–12.30

ZORAN HADŽI-VELKOV

University Ciril and Methodius, Skopje,
Macedonian Academy of Sciences and Arts

FEDERATED LEARNING FOR
COMMUNICATIONS

12.35–13.05

ADAM WOJCIECHOWSKI

Lodz University of Technology, Poland

INTELLIGENT USER INTERFACES

13.10–13.25

COFFEE BREAK

13.25–14.30

SESSION IV
ARTIFICIAL INTELLIGENCE
AND MULTIMEDIA

chaired by
ZORAN HADŽI VELKOV

13.25–13.55

FILIP RADENOVIĆ

Meta AI, USA

ENHANCING MULTIMODAL
GENERATION MODELS

14.00–14.30

KOSTA PAVLOVIĆ

University of Montenegro

DNN-BASED SPEECH
WATERMARKING

DISCUSSION