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2006–2026



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1971–2026

MONTENEGRIN ACADEMY OF SCIENCES AND ARTS

DEPARTMENT OF NATURAL SCIENCES
INFORMATION AND COMMUNICATION
TECHNOLOGIES BOARD

5th SCIENTIFIC MEETING

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

PROGRAMME

MONTENEGRIN ACADEMY OF SCIENCES AND ARTS
Thursday, June 4, 2026

ORGANIZING COMMITTEE:

ACADEMICIAN LJUBIŠA STANKOVIĆ,

President of the Montenegrin Academy of Sciences and Arts

ACADEMICIAN IGOR ĐUROVIĆ,

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

ASSIST. PROF. DR MILOŠ BRAJOVIĆ,

Faculty of Electrical Engineering, University of Montenegro

Venue:

**MONTENEGRIN ACADEMY OF SCIENCES AND ARTS,
Rista Stijovića 5, Podgorica**

THURSDAY, JUNE 4, 2026
8.30–15.00

08.30–08.40

OPENING ADDRESS:

- **ACADEMICIAN LJUBIŠA STANKOVIĆ,**
President, Montenegrin Academy of Sciences and Arts

08.40–10.35

Session I

**SIGNAL PROCESSING, ARTIFICIAL
INTELLIGENCE AND STATISTICAL
INFERENCE**

- ◻ Chaired by: **ACADEMICIAN IGOR ĐUROVIĆ,**
Montenegrin Academy of Sciences and Arts

08.40–09.15

- **PATRICK FLANDRIN,**
University of Lyon, France
Signal processing in the age of AI

09.15–10.00

- **ABDELHAK ZOUBIR,**
Technical University Darmstadt, Germany
Advances in robust inference for signal processing

10.00–10.35

- **CORNEL IOANA,**
Grenoble INP ENSE3-GIPSA-lab, France
*Physically-driven artificial intelligence
— a potential way to better understand
the transient phenomena*

10.35–10.55

COFFEE BREAK

10.55–12.30

Session II

SPATIAL SIGNAL PROCESSING AND GRAPHS

- ◻ Chaired by: **PROF. DR KOSTA PAVLOVIĆ,**
University of Montenegro

10.55–11.30

- **MARIUS PESAVENTO,**
Technical University Darmstadt, Germany
*A scalable approach for characterizing
ambiguities in sparse arrays*

- 11.30–12.05 ■ **ALI BAGHERI BARDI,**
Persian Gulf University, Bushehr, Iran
*Two Fundamental Approaches to the Graph
Fourier Transform on Irregular Graphs*
- 12.05–12.30 ■ **MILOŠ BRAJOVIĆ, ISIDORA STANKOVIĆ,**
University of Montenegro
Spectral signal analysis on directed graphs
- 12.30–13.00 LUNCH BREAK

13.00–14.30 **Session III**
APPLICATIONS AND REALIZATIONS

- Chaired by: **PROF. DR MILOŠ BRAJOVIĆ,**
University of Montenegro
- 13.00–13.30 ■ **VESELIN N. IVANOVIĆ,**
University of Montenegro
*Concepts of designing and development of
the state-of-the art signal adaptive and fully
pipelined systems for time-(frequency) and
space/spatial-frequency analysis and filtering
of nonstationary 1D and 2D signals*
- 13.30–13.55 ■ **RADOVAN STOJANOVIĆ,**
University of Montenegro, MECOnet
*Embedded signal processing for
biomedical applications*
- 13.55–14.30 ■ **KOSTA PAVLOVIĆ,**
University of Montenegro, DeepMark inc
*Recent advances in neural network-
based audio watermarking*

14.30 **CONCLUDING REMARKS**

15.00–19.30 **EXCURSION AND DINNER**