



**MONTENEGRIN ACADEMY OF SCIENCES AND ARTS**

DEPARTMENT OF NATURAL SCIENCES

INFORMATION AND COMMUNICATION  
TECHNOLOGIES BOARD

**3<sup>RD</sup> SCIENTIFIC MEETING**

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

**PROGRAMME**

MONTENEGRIN ACADEMY OF SCIENCES AND ARTS

Podgorica, Friday, June 6, 2025

**ORGANIZING COMMITTEE:**

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

**ACADEMICIAN IGOR DJUROVIĆ,**  
*Secretary of the Division of Natural Sciences,  
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*

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***Venue:***

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

9.00–9.10	<b>OPENING ADDRESS:</b> <ul style="list-style-type: none"> <li>ACADEMICIAN LJUBIŠA STANKOVIĆ, <i>President of the Montenegrin Academy of Sciences and Arts</i></li> </ul>
9.10–10.15	<b>Session I</b> <b>GRAPH SIGNAL PROCESSING</b> <ul style="list-style-type: none"> <li>Chaired by ACADEMICIAN IGOR DJUROVIĆ</li> </ul>
9.10–9.40	<ul style="list-style-type: none"> <li>GERAL MATZ, <i>Technische Universität Wien, Vienna, Austria</i>  <i>„Localized Frames for Computationally Efficient Graph Signal Processing“</i></li> </ul>
9.45–10.15	<ul style="list-style-type: none"> <li>ALI BAGHERI BARDI<sup>1,2</sup> &amp; MILOŠ BRAJOVIĆ<sup>2</sup>,  <i><sup>1</sup>Persian Gulf University, Bushehr, Iran, <sup>2</sup>University of Montenegro</i>  <i>A Framework for Graph Fourier Transforms on Directed Graphs</i></li> </ul>
10.15–10.35	COFFEE BREAK
10.35–11.35	<b>Session II</b> <b>AI IN MEDICINE</b> <ul style="list-style-type: none"> <li>Chaired by DOC. DR MILOŠ BRAJOVIĆ</li> </ul>
10.35–11.05	<ul style="list-style-type: none"> <li>ERVIN SEJDIĆ, <i>University of Toronto, Canada</i>  <i>AI in Medicine, (online lecture)</i></li> </ul>
11.05–11.35	<ul style="list-style-type: none"> <li>DANILO MANDIĆ, <i>Imperial College, London, United Kingdom</i>  <i>Machine Intelligence for eHealth: Hearables for 24/7 Doctorless Hospitals?</i></li> </ul>

11.35–12.05

**Session III**  
**RADARS**

- Chaired by Doc. Dr Miloš Brajović

11.35–12.05

- **MARCO MARTORELLA**,  
*University of Birmingham, United Kingdom*  
*3D ISAR imaging of non-cooperative targets*

12.05–12.25

COFFEE BREAK

12.25–14.00

**Session IV**  
**APPLICATION IN VEHICLE CONTROL**  
**AND TRAFFICK MONITORING**

- Chaired by Academician Igor Djurović

12.25–12.55

- **CÉDRIC RICHARD**,  
*University Côte d'Azur, Nice, France*  
*This Wheel's on Fibre: using fibre optic*  
*sensing for traffic monitoring*

12.55–13.25

- **BRANKA JOKANOVIĆ**,  
*Amazon, Spain*  
*Advanced driver-assistance systems (ADAS)*  
*and application of the machine learning in*  
*the automotive industry, (online lecture)*

13.25–13.55

- **SLOBODAN DJUKANOVIĆ**,  
*Siemens, Czech Republic*  
*Acoustic foundation model-based*  
*vehicle speed estimation in real-world*  
*environments, (online lecture)*

13.55

**CONCLUDING REMARKS**