

Brain Informatics 2025 conference location:

Aula Magna “Domus Sapientiae” - Dipartimento di Architettura Costruzione e Design (ARCOD), Polytechnic University of Bari, via E. Orabona 4, 70125 Bari (BA)

Zoom link Main Conference (11-12-13 November):

<https://us06web.zoom.us/j/89789542342?pwd=XvBGXHjY7slDaMfxpKuQLsXR6bnKpd.1>

ID meeting: 897 8954 2342

Day 1 — Tue, Nov 11, 2025

08:30–09:00	Registration	
09:00–09:30	Opening Ceremony	
09:30–10:15	Invited Talk 1: Islem Rekik	
10:15–13:00 Workshops	EAMH 2025 (online: 10:15-13:00)	Link zoom: https://us06web.zoom.us/j/89537888897?pwd=mMlrcdC2AUfA3iQh3jovC92Q2FIkss.1
10:30–11:00	Coffee	
11:00–12:30	Main Track Session 1	
12:30–14:00	Lunch	
14:00–17:30 Workshops	XAIB 2025 (online: 15:00 - 17:00)	Link zoom: https://us06web.zoom.us/j/85288808839?pwd=4fmWyOGZrgGwa96ximjQOxaU2ZGnLw.1
	CNTR (online: 14:00-16:30)	Link zoom: https://us06web.zoom.us/j/81180976056?pwd=ibaPaoEMwcl5KYEUiidgX8Xn41zL6x.1
	GAIN (online 15:00 - 18:00)	Link zoom: https://stevens.zoom.us/j/93328488576 Meeting ID: 933 2848 8576
14.00-15.30	Main Track Session 2	
15:30–16:00	Coffee	
16:00–17:15	Main Track Session 3	
18:00	Welcome Cocktail	Location: Polytechnic University of Bari – Atrio near Aula Magna “Domus Sapientiae”

Day 2 — Wed, Nov 12, 2025

08:30–09:00	Registration	
09:00–09:45	Invited Talk 2: Giorgio A. Ascoli	
09:45–13:00 Workshops	<i>Web Intelligence meets Brain Informatics</i> (hybrid: 09:45-12:30)	Location: Aula BINP Link zoom: https://us06web.zoom.us/j/84797249902?pwd=ReugwltWMpMG74eGbkqlUJZfBCccTI.1
	<i>Neural Data Analysis for BCI & Brain Disorders</i> (hybrid: 09:45-13:00)	Location: Museo della Fotografia Link zoom: https://us06web.zoom.us/j/82529426308?pwd=egDUxDXsbbNHtwE3GXb7SZp5iMogx4.1
	<i>Brain Information Mechanisms in Special Populations</i> (online: 09:45-12:30)	Link zoom: https://us06web.zoom.us/j/84304253945?pwd=1kXpVnLK4OsGKaQ5off2bOh0dgabMR.1
09:45-10.30	Main Track Session 4	
10:30–11:00	Coffee	
11:00–12:30	Main Track Session 5	
12:30–14:00	Lunch	
14:00–14:45	Invited Talk 3: Giulio Pergola	
14:00–15:30 Workshops	<i>Spatio-Temporal Brain Data Modelling</i> (hybrid)	Location: Aula BINP Link zoom: https://us06web.zoom.us/j/85248308758?pwd=EZsaruk62ExwT7V4Q1Cai7B68xYFg4.1
	<i>Neuro-AI Synergy</i> (hybrid)	Location: Museo della Fotografia Link zoom: https://us06web.zoom.us/j/87228463210?pwd=Mdp98Z013AjoNbwMYuNQM4yzpmvCbj.1
14:45–15:30	Main Track Session 6	
15:30–16:00	Coffee	
16:00–16:45	Main Track Session 7	
19:30	Social Dinner, Award Ceremony and BI 2026 Announcement	Location: Hotel Grande Albergo delle Nazioni, Lungomare Nazario Sauro, 7, 70121 Bari

Day 3 — Thu, Nov 13, 2025

09:00–09:45	Invited Talk 4: Luca Longo
09:45–10:30	Main Track Session 8
10:30–11:00	Coffee
11:00–12:30	Main Track Session 9
12:30–14:00	Lunch
14:00–14:45	Invited Talk 5: Morten L Kringelbach
14:45–15:00	Closing
15:00–16:00	Closing Coffee Network

Session 1 - Cognitive Foundations & Perception 11 November, 11:00–12:30 Session Chair: Prof. Elvira Brattico, University of Bari and Aarhus University	
Pex Tufvesson	B202 - What Song am I Thinking of? Temporal Generalization of EEG During Music Imagery
Ilya Kovalenko, Eugenia Ahremenko, Alexandr Andreev, Danila Apushkin, Veronika Prikhodko, Yuri Sysoev, Sergey Okovitiy, Marina Barulina, and Eduard Korkotian	B209 - Season-Dependent Variations in Behavioral Patterns of Freely Moving Rats, Revealed by Computer Vision
Mingxuan Ma, Sheng Yang, Junjie Qiu, Junxia Han, and Guanqiao Peng	B245 - Elevated Neural Noise Hinders Cognitive Flexibility and Generalization Abilities in Children with Autism Spectrum Disorder
Xiaofei Zhang and Xiang He	B262 - Hemispheric Differences in Local Morphology of Functional Networks During Visual Word Recognition: Evidence from Multiple AAL Atlases
Giuseppe Antonio Motisi, Francesca Lizzi, Francesca Mainas, Gianmarco Tiddia, Sara Calderoni, Piernicola Oliva, and Alessandra Retico	B216 - A Graph Neural Network approach to study the Human Connectome in male individuals with Autism Spectrum Disorders
Marlis Ontivero Ortega, Javier Rasero, Antonio Jimenez-Marin, Jesus Cortes, Luca Faes, Daniele Marinazzo, and Sebastiano Stramaglia	B257 - A novel measure of high-order brain functional connectivity: application in Autism reveals atypical synergistic patterns

Session 2 - Human Information Processing & Pain

11 November, 14:00–15:30

Session Chair: Dr. Paolo Sorino, Polytechnic University of Bari

Luis Alfredo Moctezuma	B203 - Emotion Recognition Across Wakefulness and Sleep Using High-Density EEG and Machine Learning Techniques
Li Jia, Chen Shihao, Zhang Libo, Weng Lingling, Tu Yiheng, and Peng Weiwei	B247 - Dynamic Expectations Shape Pain Perception: Dissociable α -Oscillatory Mechanisms of Expectation Strength and Precision
Alex Romanova	B261 - Time Aligned Sliding Graph Embeddings for Dynamic Time Series Analysis
Li Jia, Chen Shihao, Zhang Libo, Weng Lingling, Tu Yiheng, and Peng Weiwei	B247 - Dynamic Expectations Shape Pain Perception: Dissociable α -Oscillatory Mechanisms of Expectation Strength and Precision
Reyhan Zeynep PEK and Reda ALHAJJ	B281 - Exploring Cross-Modality Fusion of Neuroimaging and Handwriting Biomarkers in Parkinson's Disease
Chen Shihao, Li Jia, and Peng Weiwei	B248 - Neural oscillations underlying pain prediction in temporal statistical learning

Session 3 - Mental Health & Epigenetic Models

11 November, 16:00–17:15

Session Chairs: Prof. Tiziana Lanciano, University of Bari

Prof. Paolo Taurisano, University of Bari

Ilham El Idrissi and Jan Treur	B224 - Epigenetic Influence in Tourette Syndrome: A Higher-Order Adaptive Network Modeling Approach
Koen Woortman, Enrico Yang, Zerrin Işık, and Jan Treur	B267 - Modeling the Adaptive Role of Environmental Influences and Epigenetics on Seasonal Affective Disorder
Marco Bottino, Michael Smolka, Justin Böhmer, Garvit Joshi, Henrik Walter, and Michael Marxen	B251 - Meta-matching improves the prediction of consumption in alcohol use disorder based on functional connectivity with reliable and specific feature relevance maps
Alessandro Piro, Ivan Mangiulli, Nicole Novielli, Filippo Lanubile, and Antonietta Curci	B255 - Detection of cognitive-emotional feedback in therapeutic interactions
Gabriele Acquaroli, Anish Autar, Sophie C.F. Hendrikse, and Jan Treur	B268 - An Adaptive Network Model of Cotard's delusion: Mapping Nihilistic Beliefs Across Neurobiological Levels

Session 4 - AI for Cognitive Health

12 November, 09:45–10:30

Session Chair: Prof. Ester Pantaleo, University of Bari

jing Fang, Xuanrui Quan, HONGXIA xu, and Jianzhuo Yan	B230 - Graph-Based Personalized Medication Recommendation Using EHR and Drug Molecular Representations
Nikita Gautam, George Durrett, Doina Caragea, and Heather Bailey	B284 - Assessment of Memory Recall and Cognitive Health using Large Language Models
Tommaso Colafiglio, Angela Lombardi, Domenico Lofù, Paolo Sorino, Fedelucio Narducci, and Tommaso Di Noia	B271 - EEGScope: a framework for the real-time acquisition, processing, and analysis of EEG data

Session 5 - Brain Big Data: Alzheimer's & Dementia

12 November, 11:00–12:30

Session Chair: Prof. Hong Yu, Chongqing University of Posts and Telecommunications

Amisha Kumari, Niha Kamal Basha, Noushath Shaffi, Vimbi Viswan, and Mufti Mahmud	B221 - AlzViTNet: A Hybrid Vision Transformer and Graph Convolutional Network Framework for Multiclass Alzheimer's Disease Classification from MRI Images
Hafiz Muhammad Ali Bhatti, Thomas Borsani, Andrea Rosani, and Giuseppe Di Fatta	B276 - Interpretable MRI-Based Biomarkers for Alzheimer's Disease Classification
Md Siyamul Islam, Md. Mahfuzur Rahman, and Mufti Mahmud	B289 - A Multimodal Deep Learning System for Alzheimer's Disease Detection with Automated Clinical Feature Selection
Angela Lombardi, Carmelo Ardito, Eugenio Di Sciascio, and Tommaso Di Noia	B287 - SimBRAge: A Framework for Region-Level Morphometric Simulation for What-If Brain Age Analysis
Mohamed Radwan, Pedro Lind, and Anis Yazidi	B272 - Frequency bands EEG Biomarkers for Dementia using Graph Neural Networks

Session 6 - BCI Methods

12 November, 14:45–15:30

Session Chair: Dr. Tommaso Colafiglio, Polytechnic University of Bari

Xicheng Lou, Xinwei Li, Hongying Meng, and Zhangyong Li	B226 - EEG-DBNet: A Dual-Branch Network for Temporal-Spectral Decoding in Motor-Imagery Brain-Computer Interfaces
Hazar Zilelioglu, Alexandre Delaux, Julien Carponcy, Alix Gouret, and Solène Le Bars	B208 - Optimizing EEGNet for Code-Modulated Visual Evoked Potential Classification
Vegard Omsland, Paal Urdahl, Andres Soler, and Marta Molinas	B274 - Advancing Assistive BCIs: Ensemble Learning for Robust RGB-Evoked EEG Classification in Complex Visual Paradigms

Session 7 - BCI Applications

12 November, 16.00–16:45

Session Chair: Prof. Shuqiang Wang from Shenzhen Institute of Advanced Technology, CAS

Michele Romani, Devis Zanoni, Elisabetta Farella, and Luca Turchet	B246 - BrainForm: a Serious Game for BCI Training and Data Collection
Hiromu Fukumoto and Toshiaki Omori	B269 - EEG-driven Music Generation with Latent Discrete Diffusion Models
lucas benoit, Giulia Lioi, Yassine El Ouahidi, Nicolas Farrugia, Jérémie Mattout, Emmanuel Maby, Clément Bougard, and Julien Dauguet	B259 - Adjusting classical BCI paradigms parameters to optimize performance with a wearable dry-electrode EEG device: towards operational conditions

Session 8 - Neuromorphic & Brain-Inspired Computing

13 November, 09.45–10.30

Session Chair: Prof. Domenico Lofù, Polytechnic University of Bari

lihua gu, qun liu, and guoyin wang	B205 - Brain-Inspired Fractional Convolution for Pathological Image Classification
Brian Pachideh, Sven Nitzsche, Moritz Neher, Jann Krausse, Carmen Weigelt, Klaus Knobloch, Victor Pazmino Betancourt, and Juergen Becker	B253 - YANA: Bridging the Neuromorphic Simulation-to-Hardware Gap
Qi'ao Xu, Pengfei Wang, Bo Zhong, Tianwen Qian, Xiaoling Wang, Ye Wang, and Hong Yu	B279 - TS-P ² CL: Plug-and-Play Dual Contrastive Learning for Vision-Guided Medical Time Series Classification

Session 9 - Brain Big Data: Graphs, EEG & ML

13 November, 11.00–12.30

Session Chairs: Prof. Vito Walter Anelli, Polytechnic University of Bari

Prof. Angela Lombardi, Polytechnic

University of Bari

Chiara Camastra, Fabiana Novellino, Assunta Pelagi, Gioele Maria Pullano, Andrea Quattrone, and Alessia Sarica	B207 - Interpretable Machine Learning for Parkinson's Disease: Biomarker-Based Comparison of EBM and GAMI-Net
Li Zhuo, Chen Xuhang, and Wang Shuqiang	B229 - UltraDfeGAN: Detail-Enhancing Generative Adversarial Networks for High-Fidelity Functional Ultrasound Synthesis
Mohamed Radwan, Pedro Lind, and Anis Yazidi	B256 - Dynamic Graphs Analysis of EEG
Taufique Ahmed and Luca Longo	B280 - Neighbourhood-clipped latent space of VAEs with spatially preserved EEG topographic maps for ocular artefact reduction
Hyuk Jin Yun, Sarah, S Foster, Maura, E Sien, Sherwin, S Chan, and Avner Meoded	B263 - Deep Learning-Based Brain Age Prediction: A Quantitative Biomarker of Children's Brain Development

The 5th Special Session on Explainable Artificial Intelligence for Unveiling the Brain: From Black-Box to Glass-Box

(XAIB 2025)

November 11, 2025, 15:00-17:30 Bari Time, Italy

Workshop Mode : Online

Important Notice:

Invited Speech, 30-40 min

Oral Presentation: 15 min (including Q & A)

Organizing Chair Information:

- Prof. Alessia Sarica, Neuroscience Research Center, Department of Medical and Surgical Sciences, Magna Graecia University of Catanzaro, Italy, sarica@unicz.it

- Dr. Vincenzo Dentamaro, Computer Science Department, University of Bari Aldo Moro, Bari, Italy, vincenzo.dentamaro@uniba.it

Moderator:

- Chiara Camastra, Neuroscience Research Center, Department of Medical and Surgical Sciences, Magna Graecia University of Catanzaro, Italy, chiara.camastra@unicz.it

15:00-15:10 (CET)	Opening Remark Speaker: Alessia Sarica <i>Neuroscience Research Center, Department of Medical and Surgical Sciences, Magna Graecia University of Catanzaro, Italy</i>
15:10-15:40 (CET)	Conformal Prediction for Trustworthy, Explainable AI Invited Speaker: Valeriy Manokhin <i>Machine learning researcher and practitioner known for advancing the theory and practice of Conformal Prediction</i>
15:40-16:00 (CET)	Deterministic Explainability with EVIDENCE and MuPAX theories Invited Speaker: Vincenzo Dentamaro <i>Computer Science Department, University of Bari Aldo Moro, Bari, Italy</i>
16:00-16:10 (CET)	Beyond Stochastic XAI: Deterministic and Reproducible Explanations in Genomic Data Invited Speaker: Felice Franchini <i>Computer Science Department, University of Bari Aldo Moro, Bari, Italy</i>
16:10-16:25 (CET)	(Oral Presentation S01203) Interpretable Deep Neural Network integrated with Attention and Long-term Dependencies for Cross-patient Schizophrenia Detection using EEG Signals Speaker: Muhammad Hussain <i>Department of Computer Science, College of Computer and Information Sciences, King Saud University, Riyadh, Saudi Arabia</i>
16:25-16:40 (CET)	(Oral Presentation S01201) Method of early diagnosis of abnormal movements of patients with tremor symptoms using augmented reality Speaker: Volodymyr Hrytsyk

*Virtual Reality Systems Department. Lviv Polytechnic National University,
79013 Lviv, Ukraine*

16:40-17:05 (CET) (Oral Presentation S01202) Decision Voting Based Multiscale Convolutional Learning of Brain Networks With Explainability
Speaker: Sanjay Ghosh
Indian Institute of Technology Kharagpur, India

17:05-17:20 (CET) (Oral Presentation B238) Speech Reconstruction from sEEG Using CNN–BiLSTM Networks and Transfer Learning from ECoG
Speaker: Asmaa Sbaih
Seville University, Spain

17:20-17:30 (CET) Closing Remark
Speaker: Alessia Sarica
Neuroscience Research Center, Department of Medical and Surgical Sciences, Magna Graecia University of Catanzaro, Italy

The 7th International Workshop on Cognitive Neuroscience of Thinking and Reasoning (CNTR 2025) AGENDA

November 11, 2025, 13:30-16:00 Bari Time, Italy

November 11, 2025, 20:30-23:00 Beijing Time, China

Workshop Mode : Online

Tencent meeting ID: 280-438-976

Important Notice: Invited Speech, 30-40 min, Oral Presentation: 15 min (including Q & A)

Organizing chairs: Peipeng Liang, Vinod Goel

20:30 - 20:40	Opening Speaker: <i>Peipeng Liang</i> School of Psychology, Capital Normal University, China
20:40 - 21:20	Title: Differential Roles of Left and Right Prefrontal Cortex in Reasoning Invited talk: <i>Vinod Goel</i> Department of Psychology, York University, Canada
21:20 - 22:00	Title: Hippocampal-prefrontal functional orchestration underlies higher-order learning for creative ideation Invited talk: <i>Ze Zhang</i> School of Psychology, Beijing Normal University, China
22:00 - 22:15	Title: Definition and Value Reconfiguration of Human Creativity in the AI Era Author: Ke Jiang, Ruizhi Huang, Zhoujie Shen, Wenjing Yan Speaker: <i>Zhoujie Shen</i> College of Psychiatry, Wenzhou Medical University
22:15 - 22:30	Title: The neural oscillatory mechanisms of transitive inference mediated by the hippocampus-medial prefrontal cortex circuit Author: Ziao Liu, Linan Zhuo, Yuchen Wang, Rongrong Niu, Weiwen Wang, Ping Yu, Peipeng Liang Speaker: <i>Ziao Liu</i> School of Psychology, Capital Normal University, China
22:30 - 22:45	Title: The Impact of Maternal Prenatal Psychological Distress on Early Childhood Behavioral Problems Author: Shangqing Yuan Speaker: <i>Shangqing Yuan</i> School of Education, Huainan Normal University
22:45 - 23:00	Title: Modulating The Conjunction Fallacy Through Stimuli Manipulation and Anodal tDCS Stimulation Author: Xiuying Miao, Hengrui Zhang, Peipeng Liang, Vinod Goel Speaker: <i>Xiuying Miao</i> School of Psychology, Capital Normal University, China

The 5th Workshop on Environmental Adaptation and Mental Health (EAMH)

November 11, 2025, 09:00-12:10 Bari Time, Italy

Workshop Mode: Online

Important Notice:

Invited Speech, 30-40 min

Oral Presentation: 15 min (including Q & A)

Organizing Chair

Yang Yang, Zelong Meng, Yidi Chen, Huixin Hu,
Beijing Forestry University, China

09:00-09:10
(CET)

Opening

09:10-09:50
(CET)

Invited Speech

Connection with Nature Enriches Psychological Richness

Speaker: Ying Yang

Tianjin University, China

09:50-10:30
(CET)

Invited Speech

Non-Suicidal Self-Injury in Adolescents Based on Grounded Theory:
Occurrence, Functions, and Cessation Mechanisms

Speaker: Guangxin Wang

Beijing Forestry University, China

10:30-10:40
(CET)

Break

10:40-11:20
(CET)

Invited Speech

Physical Activity as a Natural Health Prescription: The Carry-Over Effect
from Physical Activity to Pro-Environmental Behavior

Speaker: Yidi Chen

Beijing Forestry University, China

11:20-11:35
(CET)

Oral Presentation

Altered Resting-State Brain Activity in MDD and Schizophrenia: An ALE
Meta-Analysis

Speaker: Yufei Chang

Beijing Forestry University, China

12:05-
12:10(CET)

Closing Remark

Workshop on Web Intelligence meets Brain Informatics (WImBI' 25)

Program (Part One)

November 12, 2025, 16:45-19:45 Beijing Time (9:45-12:45 Bari Time)

Workshop Mode : Hybrid

Important Notice: This is Part One of WImBI 2025, the Brain Informatics edition. We also invite you to explore Part Two, the WI-IAT edition, available at: <https://www.wi-iat.com/wi-iat2025/index.html>.

Jianzhao Yan, Beijing University of Technology, China
Hongzhi Kuai, Chongqing University of Posts and Telecommunications, China
Jianhui Chen, Beijing University of Technology, China
Jiajin Huang, Beijing University of Technology, China

16:45-17:15 (BJT)
9:45-10:15 (CET)

Opening Address
Speaker: Ning Zhong
Maebashi Institute of Technology, Japan

17:15-17:45 (BJT)
10:15-10:45 (CET)

Title: Towards Inclusive AI for Improved Brain Disorder Detection and Management: Challenges and Opportunities
Invited speaker: Mufti Mahmud
King Fahd University of Petroleum and Minerals, Saudi Arabia

17:45-18:15 (BJT)
10:45-11:15 (CET)

Title: Machine Learning Integrating Disease Mechanisms for Population Health Analysis
Invited speaker: Hong Yu
Chongqing University of Posts and Telecommunications, China

18:15-18:45 (BJT)
11:15-11:45 (CET)

Title: Systematic Brain Computing for Understanding of High-Order Cognition
Invited speaker: Hongzhi Kuai
Chongqing University of Posts and Telecommunications, China

18:45-19:00 (BJT)
11:45-12:00 (CET)

Title: An Interpretable Framework based on Knowledge Distillation for Hypertension Early Warning Model
Yumiao Chang, Beijing University of Technology, China
Shaofu Lin, Beijing University of Technology, China
Jianhui Chen, Beijing University of Technology, China

19:00-19:15 (BJT)
12:00-12:15 (CET)

Title: A Transformer-Based Model for Renal Cell Carcinoma Prediction
Jiatong Fan, Beijing University of Technology, China
Zitong Zhang, Beijing University of Technology, China
Jianhui Chen, Beijing University of Technology, China

19:15-19:30 (BJT)
12:15-12:30 (CET)

Title: Exploration of chronic disease pre-triage system based on LLM and RGA
Xuerui Cheng, University of Illinois Urbana-Champaign, USA
Yu Zheng, Beijing University of Technology, China
Rui Han, Beijing University of Technology, China
Hongxia Xu, Beijing University of Technology, China

19:30-19:45 (BJT)
12:30-12:45 (CET)

Title: A Graph-Aware Transformer Model for Event Extraction in Hotline Texts
Zining Luo, Beijing University of Technology, China
Zhiyi Tang, Beijing University of Technology, China
Jianhui Chen, Beijing University of Technology, China

The International Workshop on Brain Information Mechanisms in Special Populations

November 12, 2025, 9:45-11:45 Bari Time, Italy (16:45-18:45 Beijing Time)

Workshop Mode: Online

Important Notice:

Oral Presentation: 15 min (including Q & A)

Organizing Chair Information

9:45-10:00 (Bari Time) 16:45-17:00 (Beijing Time)	Title Multimodal MRI and Psychological Features-Based Machine Learning for Predicting Migraine and Attack States Speaker: Li Hu Affiliation: Chinese Academy of Sciences, China
10:00-10:15 (Bari Time) 17:00-17:15 (Beijing Time)	Title: NeuroLingua: An Interpretable Machine Learning Method for Bilingual Speech Reconstruction from Stereotactic EEG Signals Speaker: Siqi Cai Affiliation: Harbin Institute of Technology, Shenzhen, China
10:15-10:30 (Bari Time) 17:15-17:30 (Beijing Time)	Title: Neural mechanism of cognitive deficits following chronic adaptation to high altitude: a longitudinal study Speaker: Yazhuo Kong Affiliation: Chinese Academy of Sciences, China
10:30-11:00 (Bari Time) 17:30-17:45 (Beijing Time)	Break
11:00-11:15 (Bari Time) 18:00-18:15 (Beijing Time)	Title: Dynamic neural reconfiguration underpins empathy development in preschoolers: A multimodal EEG study Speaker: Chenbo Wang Affiliation: East China Normal University, China
11:15-11:30 (Bari Time) 18:15-18:30 (Beijing Time)	Title: Towards Explainable Diagnosis: Predicting 1p/19q Status in Glioma via Clinically Attentive Fusion of MRI and Patient Data Speaker: Shaoguo Cui Affiliation: Chongqing Normal University, China
11:30-11:45 (Bari Time) 18:30-18:45 (Beijing Time)	Title: Altered Amygdala-Based Resting-State Functional Connectivity in Young Person with Chronic Pain Speaker: Panpan Zheng Affiliation: Yangzhou University, China

The International Workshop on Neural Data Analysis for Brain-Computer Interfaces and Brain Disorders

November 12, 2025, 9:45-12:00 Bari Time, Italy

Workshop Mode : Hybrid

Chairs: Xinwei Li, Ke Liu & Zhiyuan Zhu, Chongqing University of Posts and Telecommunications, China

9:45-10:15 (CET)	SemSTNet: EEG semantic metric learning with class prototypes generated by pretrained language model Invited Speaker: Jingcong Li Affiliation: <i>South China Normal University, China</i>
10:15-10:45 (CET)	Topological Representation Learning in Brain Imaging via Graph Neural Networks Invited Speaker: Zhiyuan Zhu Affiliation: <i>Chongqing University of Posts and Telecommunications, China</i>
10:45-11:00 (CET)	S07203: The AppleCatcher Game: A Motor Imagery BCI Platform for Investigating Cortical Activation during Imagined Hand Movements Authors: Erlend Skredsvig, Robin Kneider, and Marta Molinas Affiliation: Norwegian University of Science and Technology, Norway
11:00-11:15 (CET)	B212: Classification of Motor Imagery Data using TCN-Transformer Authors: Miroslav Bártík, Duc Thien Pham, and Roman Mouček Affiliation: University of West Bohemia in Pilsen
11:15-11:30 (CET)	B220: An Ensemble of Lightweight Convolutional Neural Networks for EEG Based Major Depressive Disorder Detection Authors: Fatima Hussain, Muhammad Hussain, and Saad AlAhmadi Affiliation: King Saud University, Saudi Arabia
11:30-11:45 (CET)	B242: A Novel Framework for Analyzing the Speed-Accuracy Trade-off in Online P300-Based Brain-Computer Interfaces Authors: Javier Jiménez and Francisco de Borja Rodríguez Affiliation: Universidad Autónoma de Madrid, Spain
11:45-12:00 (CET)	S03201: From Prediction to Understanding: Interactive Explanations and Mental Models in Brain Age Estimation Authors: Maria Luigia Natalia De Bonis, Giuseppe Fasano, Angela Lombardi, Ilaria Bortone, Eugenio Di Sciascio, Tommaso Di Noia, and Carmelo Ardito Affiliation: Polytechnic University of Bari, Italy

The Workshop on Neuro-AI Synergy: Multimodal Approaches to Study Brain Connectivity in Neurological Diseases

November 12, 2025, 14:00-15:15 Bari Time, Italy

Workshop Mode : In-Person

Chairs: Nicola Amoroso, University of Bari Aldo Moro, Italy

Marianna La Rocca, University of Bari Aldo Moro, Italy

Important Notice:

Invited Speech, 30-40 min; Oral Presentation: 15 min (including Q & A)

Organizing Chair Information

14:00-14:15 (CET)	Brain signature of physical frailty Speaker: Loredana Bellantuono <i>Affiliation: Università degli Studi di Bari Aldo Moro, Dipartimento di Biomedicina Traslazionale e Neuroscienze (DiBraIN)</i>
14:15-14:30 (CET)	Brain A novel measure of high-order brain functional connectivity Speaker: Sebastiano Stramaglia <i>Affiliation: Università degli Studi di Bari Aldo Moro, Dipartimento Interateneo di Fisica</i>
14:30-14:45 (CET)	A joint complex network and machine learning approach for identifying key gene communities in autistic brain" Speaker: Antonio Lacalamita <i>Affiliation: Università degli Studi di Bari Aldo Moro, Dipartimento Interateneo di Fisica</i>
14:45-15:00 (CET)	Brain connectivity changes in Post-traumatic Epilepsy Speaker: Emanuela Amato <i>Affiliation: Università degli Studi di Bari Aldo Moro, Dipartimento Interateneo di Fisica</i>
15:00-15:15 (CET)	Exponential random graph-based eXplainable Artificial Intelligence for Alzheimer disease Speaker: Ester Pantaleo <i>Affiliation: Università degli Studi di Bari Aldo Moro, Dipartimento Interateneo di Fisica</i>

Special Session on “Spatio-Temporal Brain Data Modelling: New Approaches to Understanding Brain Dynamics”

Maryam Doborjeh, Auckland University of Technology, New Zealand

Mufti Mahmud, King Fahd University of Petroleum and Minerals, Saudi Arabia

Special Session on “Spatio-Temporal Brain Data Modelling: New Approaches to Understanding Brain Dynamics”		
12 November 14:00-15.30		HYBRID
Invited Talk	Maryam Doborjeh	NeuCube: A biological plausible spiking neural network framework for modeling spatial temporal brain data (EEG and fMRI)
Invited Talk	Mufti Mahmud	Towards Inclusive AI in Neural Disease Detection and Management
B218	Duanghathai Wiwatratana	Chayapol Sae-chueng, Nakorn Chukasemrat, Poopa Kaewbuapan, Sirawaj Ithiphuripat, and Duanghathai Wiwatratana, A novel approach, a modified phase-based analysis to assess the behavioral and neural effects of tDCS across three brain regions
S10201	Elvira Brattico	Elvira Brattico, Leading Eigenvector Dynamics Analysis (LEiDA) in Developmental Neuroscience
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