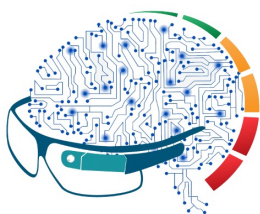




CONFERENCE PROGRAM

2026 IEEE INTERNATIONAL CONFERENCE ON
Metrology for
eXtended Reality, **Artificial**
Intelligence and **Neural Engineering**

CHEMNITZ, GERMANY · OCTOBER 20-22, 2026



IEEE

METROXRAINE 

CHEMNITZ2026

5th EDITION

LESS PAPER, MORE DETAILS



This year, we are taking a step towards a greener future with a more compact and environmentally friendly programme booklet. Here, you will find the **main conference sessions**, including their times and locations. For detailed information about the individual presentations within each session, we invite you to visit our **IEEE MetroXRAINE Padlet** by scanning the QR code alongside. Thank you for helping us make this event more sustainable!



padlet





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IEEE MetroXRaine 2026 Keynote Speakers

Plenary Session - Tuesday October 20 - H 11:40



From Data to Decisions: Advancing
Diagnostics through AI, Deep Learning, and
Hybrid Intelligence

Konstantinos Gryllias

*Department of Mechanical Engineering
KU Leuven, Belgium*

Plenary Session - Wednesday October 21 - H 11:10



Measuring Motor Behaviors to Guide
Interventions in Neurological Conditions

Paolo Bonato

Massachusetts Institute of Technology, USA

Plenary Session - Wednesday October 21 - H 12:10



Untethered Intelligence: Why Generative
Edge AI Doesn't Need the Cloud

Danilo Pietro Pau

STMicroelectronics



Plenary Session - Thursday October 22 - H 11:10



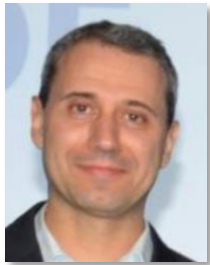
Future Communication Networks for Collaborative Robotics

Frank Hanns Paul Fitzek

TU Dresden, Germany

IEEE MetroXRINE 2026 Tutorials

Tutorial Session - Tuesday October 20 - H 13:40



MedTech & IA: from promise to practice in CNS care

César Rodríguez Domínguez

Neuraxpharm

Tutorial Session - Thursday October 22 - H 12:10



Graphical abstracts - what matters to improve your next one

Norbert Rasch

Mittweida University of Applied Sciences, Germany

IEEE MetroXRaine 2026 Special Events / Panels

Special Event - Tue October 20 - P1 H 09:30 - P2 H 16:20
PsychoBit 2026: Advancing Psychological Research Through Emerging Technologies

Special Event - Tue October 20 - H 16:50
ID4MetroXRAI 2026

Special Event - Wed October 21 - P1 H 09:00 - P2 H 12:10
- P3 H 14:40 - P4 H 16:50
NxGenBCI 2026: Next generation Brain-Computer Interfaces

Special Event - Wed October 21 - P1 H 09:00 - P2 H 14:40
AIRevEdu - Advanced Education and Training: Navigating the AI Revolution

Special Event - Wed October 21 - H 16:50
AURA - AI, Art and Intellectual Property: Creativity, Authenticity and the Protection of Artistic Heritage in the Age of Artificial Intelligence

Special Event - Thu October 22 - H 09:00
Youth Program

Panel - Thu October 22 - H 09:00
The Smartest in the Room: Scientific Perspectives on AI Safety Beyond Human Cognitive Dominance



IEEE MetroXRaine 2026 School Day

Mon October 19 - H 08:30

University Library • Technische Universität Chemnitz • Chemnitz, Germany

PROGRAM

08:30 - 09:45 - **TUTORIAL 1 - METROLOGY**

Smarter Sensor System Design Through Structure: The Hidden Key to Measurement Quality
Olfa **Kanoun**, *Chemnitz University of Technology, Germany*

10:00 - 12:00 - **TUTORIAL 2 - ARTIFICIAL INTELLIGENCE**

Human-Centered Digital Twins with ema: Collaborative Factory and Workplace Design using XR, AI, Omniverse and Humanoids
Michael **Spitzhirm**, *IMK Industrial Intelligence GmbH*

13:00 - 14:15 - **TUTORIAL 3 - EXTENDED REALITY**

Different technologies to interact in distributed teams
Franziska **Klimant**, *Chemnitz University of Technology, Germany*
Jennifer **Brade**, *Chemnitz University of Technology, Germany*

14:30 - 15:45 - **TUTORIAL 4 - NEURAL ENGINEERING**

Introduction to Electroencephalography and Event-Related Potentials: From Signal Acquisition to ERP Analysis Pipelines
Pasquale **Arpaia**, *University of Naples Federico II, Italy*
Ludovica **Gargiulo**, *STIIMA - CNR, Italy*

16:00 - 18:00 - **HANDS-ON 1 - BRAIN-COMPUTER INTERFACES**

Daily Wearable Brain-Computer Interfaces and Event-Related Potentials: From Signal Acquisition to ERP Analysis Pipelines
Ludovica **Gargiulo**, *STIIMA - CNR, Italy*

16:00 - 18:00 - **HANDS-ON 2 - VIRTUAL REALITY**

Build Your First Virtual Reality Game
Tareq **Al-Mustafa**, *Chemnitz University of Technology, Germany*

IEEE MetroXRaine 2026 Venue



IEEE MetroXRaine 2026 will be held at the Luxor congress & event centre.

LUXOR Chemnitz is a well-known congress and event centre located in the heart of Chemnitz, Germany. It hosts a wide range of events for all ages and interests, including conferences, trade fairs, seminars, concerts, parties, and community gatherings. The venue features multiple modern, fully air-conditioned halls and foyers with flexible seating and technical facilities, catering options, and Wi-Fi throughout.

ADDRESS

Hartmannstraße 11 - Chemnitz

IEEE MetroXRaine 2026 Social Events

Welcome Party - Tue, October 20 - H 19:00

The IEEE MetroXRaine **Welcome Party** will be held at the Luxor congress & event centre - Conference Venue - on Tuesday, October 20 - at 19:00.

Conference Dinner - Wed, October 21 - H 20:00

The IEEE MetroXRaine **Conference Dinner** will be held at the **Hotel Chemnitzer Hof**, on Wednesday, October 21 - 20:00.

ADDRESS - Theaterplatz 4 - 09111 Chemnitz

Bretzel& Beer - Farewell Party - Thu, October 22 - H 18:30

On Thursday, October 22 - 18:30, after the Closing Ceremony, there will be the **"Bretzel& Beer - Farewell Party"** at the Luxor congress & event centre - Conference Venue.



IEEE MetroXRaine 2026 Sponsors

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Program Schedule - Tuesday, Oct 20

09.00 - 09.30	Großer Saal - OPENING CEREMONY				
	Großer Saal	Mittlerer Saal	Kleiner Saal	Salon	Oberes Foyer
09.30 - 11.10	Session 1.1 - From Soft Sensors to Intelligent Measurement Systems: Metrology and AI for Industry 5.0	Session 1.2 - Data-driven and modelling approaches in human neuroscience and neuroengineering: applications to neuroimaging	Session 1.3 - Workshop - DHEAL-COM4MetroXRAI	Session 1.4 - Data ecosystems of human, cobot and mixed reality	Session 1.5 - PsychoBit - PART I
11.10 - 11.40	COFFEE BREAK / DEMO SESSION #1 / POSTER SESSION #1				
11.40 - 12.40	Großer Saal - Keynote Lecture - Konstantinos Gryllias, KU Leuven, Belgium From Data to Decisions: Advancing Diagnostics through AI, Deep Learning, and Hybrid Intelligence				
12.40 - 13.40	LUNCH / DEMO SESSION #1 / POSTER SESSION #1				
13.40 - 14.40	Großer Saal - Tutorial - César Rodríguez Domínguez, Neuraxpharm MedTech & IA: from promise to practice in CNS care				
	Großer Saal	Mittlerer Saal	Kleiner Saal	Salon	Oberes Foyer
14.40 - 16.20	Session 2.1 - Intelligent Interfaces and Cognitive Technologies for Challenging Real-World Scenarios	Session 2.2 - Intelligent Wearable Sensor Systems for AI-Driven Health and Activity Monitoring	Session 2.3 - Brain-Computer Interfaces and Neural Signal Processing for Advanced Human-Machine Interaction	Session 2.4 - Workshop SHIFT	Session 2.5 - PsychoBit - PART II
16.20 - 16.50	COFFEE BREAK / DEMO SESSION #1 / POSTER SESSION #1 (continue)				
16.50 - 18.20	Special Event ID4MetroXRAI 2026 - Panel Session				
18.20 - 19.00	Special Event ID4MetroXRAI 2026 - Funded Projects Presentation				
19.00 - 20.30	Luxor Conference Center - Welcome Party - ID4MetroXRAI 2026 Poster Presentation				



Program Schedule - Wednesday, Oct 21

	Großer Saal	Mittlerer Saal	Kleiner Saal	Salon	Oberes Foyer
09.00 - 10.40	Session 3.1 - WORKSHOP - Measurements in wearable devices for personal monitoring - PART I	Session 3.2 - Generation and quality assessment of synthetic data to drive the development of AI systems in medical imaging	Session 3.3 - Human-Device Interaction in Assistive Technologies for People with Diverse Abilities	Session 3.4 - Special Event - NxGenBCI 2026 - PART I	Session 3.5 - Special Event AIRevEdu - PART I
10.40 - 11.10	COFFEE BREAK / DEMO SESSION #2 / POSTER SESSION #2				
11.10 - 12.10	Großer Saal - Keynote - Paolo Bonato, Massachusetts Institute of Technology, USA Measuring Motor Behaviors to Guide Interventions in Neurological Conditions				
12.10 - 13.10	Großer Saal - Keynote - Danilo Pau, STMicroelectronics Untethered Intelligence: Why Generative Edge AI Doesn't Need the Cloud			Special Event - NxGenBCI - PART II - Panel discussion with clinicians	
13.10 - 14.10	LUNCH / DEMO SESSION #2 / POSTER SESSION #2				
14.10 - 14.40	DEMO SESSION #2 / POSTER SESSION #2 (continue)				
	Großer Saal	Mittlerer Saal	Kleiner Saal	Salon	Oberes Foyer
14.40 - 16.20	Session 4.1 - WORKSHOP - Measurements in wearable devices for personal monitoring - PART II	Session 4.2 - Human-Centric AI Decision Support for Patients and Caregivers in Health 5.0	Session 4.3 - Quantum Paradigms for AI and Metrology: Redefining Limits in Computation and Sensing	Session 4.4 - Special Event - NxGenBCI 2026 - PART III	Session 4.5 - Special Event AIRevEdu - PART II
16.20 - 16.50	COFFEE BREAK / DEMO SESSION #2 / POSTER SESSION #2				
16.50 - 18.30	Session 5.1 - Wearable Biosensing and Artificial Intelligence for Personalized Healthcare	Session 5.2 - Special Event - AURA	Session 5.3 - Artificial Intelligence for Energy Aware Wireless Sensor Networks	Session 5.4 - Special Event - NxGenBCI 2026 - PART IV	
20.00 - 23.00	Hotel Chemnitz Hof - Conference Dinner - Award Ceremony				

Program Schedule - Thursday, Oct 22

	Großer Saal	Mittlerer Saal	Kleiner Saal	Salon
09.00 - 10.40	Session 6.1 - Continuous Health Monitoring in Free-Living Conditions: From Multi-Parametric Sensing to Actionable Digital Biomarkers	Session 6.2 - Beyond Oscillations: Fractal Dimension, Nonlinear Dynamics, and the Future of Neural Engineering	PANEL - IEEE Women in Engineering	Youth Program
10.40 - 11.10	COFFEE BREAK / DEMO SESSION #3 / POSTER SESSION #3			
11.10 - 12.10	Großer Saal - Keynote - Frank Hanns Paul Fitzek, TU Dresden, Germany Future Communication Networks for Collaborative Robotics			
12.10 - 13.10	Großer Saal - Tutorial - Norbert Rasch, Mittweida University of Applied Sciences, Germany Graphical abstracts - what matters to improve your next one			
13.10 - 14.10	LUNCH / DEMO SESSION #3 / POSTER SESSION #3			
	Großer Saal	Mittlerer Saal	Kleiner Saal	Salon
14.10 - 15.50	Session 7.1 - Metrology-driven AI, Signal Analysis and Healthcare Modeling	Session 7.2 - General Session - PART I	Session 7.3 - General Session - PART II	Session 7.4 - Beyond Distance: Reliable XR for Telepresence and Remote Interaction
15.50 - 16.20	COFFEE BREAK / DEMO SESSION #3 / POSTER SESSION #3 / Youth Forum			
16.20 - 18.00	Session 8.1 - XR and Measurement Systems for Forensic Reconstruction and Evidence Analysis		Session 8.3 - General Session - PART III	Session 8.4 - Advances in Affective Computing and Social Interaction Technologies
18.00 - 18.30	Großer Saal - CLOSING & AWARD CEREMONY			
18.30 - 19.00	Luxor Conference Center - Bretzel & Beer			



Program Schedule - Tuesday, Oct 20

08:30 - 18:00	<i>Luxor Conference Center</i> REGISTRATIONS
09:00 - 09:30	<i>Großer Saal</i> OPENING CEREMONY - WELCOME ADDRESSES
09:30 - 11:10	<i>Großer Saal</i> Session 1.1 - From Soft Sensors to Intelligent Measurement Systems: Metrology and AI for Industry 5.0 Chairs: Loredana Cristaldi, <i>Politecnico di Milano, Italy</i> Milena Martarelli, <i>Università Politenica delle Marche, Italy</i>
09:30 - 11:10	<i>Mittlerer Saal</i> Session 1.2 - Data-driven and modelling approaches in human neuroscience and neuroengineering: applications to neuroimaging Chairs: Valentina Bordin, <i>Politecnico di Milano, Italy</i> Stefania Coelli, <i>Politecnico di Milano, Italy</i>
09:30 - 11:10	<i>Kleiner Saal</i> Session 1.3 - Workshop - DHEAL-COM4MetroXRAI Chairs: Biagio Boi, <i>University of Salerno, Italy</i> Franco Cirillo, <i>University of Salerno, Italy</i>
09:30 - 11:10	<i>Salon</i> Session 1.4 - Data ecosystems of human, cobot and mixed reality Chairs: Leif Goldhahn, <i>Mittweida University of Applied Sciences, Germany</i> Zhen Li, <i>Mittweida University of Applied Sciences, Germany</i>



FULL PROGRAM - SESSION DETAILES

This programme provides the name, time, and location of each session. To explore the individual presentations included in each session, scan the QR code on the left to access the **IEEE MetroXRaine 2026 Padlet**.

09:30 - 11:10	<i>Oberes Foyer</i> Session 1.5 - PsychoBit - PART I - Advancing Psychological Research Through Emerging Technologies Chairs: Nicola Milano, <i>University of Naples Federico II, Italy</i> Monica Casella, <i>University of Naples Federico II, Italy</i>
11:10 - 11:40	<i>Luxor Conference Center - Unteres Foyer</i> COFFEE BREAK
11:10 - 11:40	<i>Luxor Conference Center - Unteres Foyer</i> DEMO SESSION #1 Chairs: Nicola Moccaldi, <i>University of Naples Federico II, Italy</i> Lorenzo Scalise, <i>Università Politecnica delle Marche, Italy</i>
11:10 - 11:40	<i>Luxor Conference Center - Unteres Foyer</i> POSTER SESSION #1 Coordinators: Oumayma Bader, <i>Chemnitz University of Technology, Germany</i> Mirco Gallazzi, <i>STIIMA - National Research Council, Italy</i>
11:40 - 12:40	<i>Großer Saal</i> PLENARY SESSION - KEYNOTE LECTURE Chair: Milena Martarelli, <i>Università Politecnica delle Marche, Italy</i>

From Data to Decisions: Advancing Diagnostics through AI, Deep Learning, and Hybrid Intelligence

Konstantinos Gryllias, *KU Leuven, Belgium*

12:40 - 13:40	<i>Luxor Conference Center - Unteres Foyer</i> LUNCH / DEMO SESSION #1 / POSTER SESSION #1
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Still presenting Demos of the **Demo Session #1** and Posters of the **Poster Session #1**.

13:40 - 14:40	<i>Großer Saal</i> TUTORIAL Chair: Nicola Moccaldi, <i>University of Naples Federico II, Italy</i>
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MedTech & IA: from promise to practice in CNS care

César Rodríguez Domínguez, *Neuraxpharm*



14:40 - 16:20	<i>Großer Saal</i> Session 2.1 - Intelligent Interfaces and Cognitive Technologies for Challenging Real-World Scenarios Chairs: Michael Kuhl, <i>Mittweida University of Applied Sciences, Germany</i> Mansi Sharma, <i>German Research Center for Artificial Intelligence, Germany</i>
14:40 - 16:20	<i>Mittlerer Saal</i> Session 2.2 - Intelligent Wearable Sensor Systems for AI-Driven Health and Activity Monitoring Chairs: Rim Barioul, <i>Chemnitz University of Technology, Germany</i> Hiba Hellara, <i>Chemnitz University of Technology, Germany</i>
14:40 - 16:20	<i>Kleiner Saal</i> Session 2.3 - Brain-Computer Interfaces and Neural Signal Processing for Advanced Human-Machine Interaction Chairs: Cristina Polo Hortiguela, <i>University of Elche, Spain</i> Antonio Esposito, <i>University of Naples Federico II, Italy</i>
14:40 - 16:20	<i>Salon</i> Session 2.4 - Workshop SHIFT: Shaping Human-centered Interaction for Future Technologies Chairs: Giuseppe Caggianese, <i>ICAR - National Research Council, Italy</i> Marta Mondellini, <i>STIIMA - National Research Council, Italy</i>
14:40 - 16:20	<i>Oberes Foyer</i> Session 2.5 - PsychoBit - PART II - Virtual and Extended Reality Applications for Stress, Behavior, and Human Performance Assessment Chairs: Emanuele Tauro, <i>Politecnico di Milano, Italy</i> Raffaella Esposito, <i>University of Naples Federico II, Italy</i>
16:20 - 16:50	<i>Luxor Conference Center - Unteres Foyer</i> COFFEE BREAK / DEMO SESSION #1 / POSTER SESSION #1

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FULL PROGRAM - SESSION DETAILS

This programme provides the name, time, and location of each session. To explore the individual presentations included in each session, scan the QR code on the left to access the **IEEE MetroXRaine 2026 Padlet**.

16:50 - 18:20	<i>Großer Saal</i> Special Event - ID4MetroXRAI 2026 - Panel Session Moderator: Szymon Ogonowski, <i>Silesian University of Technology, Poland</i>
18:20 - 19:00	<i>Großer Saal</i> Special Event - ID4MetroXRAI 2026 - Funded Projects Presentation Chair: Szymon Ogonowski, <i>Silesian University of Technology, Poland</i>
19:00 - 20:30	<i>Luxor Conference Center - Unteres Foyer</i> WELCOME PARTY - ID4MetroXRAI 2026 Posters Presentation



Technical Program - Wednesday, Oct 21

08:30 - 17:00	<i>Luxor Conference Center</i> REGISTRATIONS
09:00 - 10:40	<i>Großer Saal</i> Session 3.1 - Measurements in wearable devices for personal monitoring - PART I Chairs: Alessandra Angelucci, <i>Politecnico di Milano, Italy</i> Sara Caramaschi, <i>Malmö University, Sweden</i>
09:00 - 10:40	<i>Mittlerer Saal</i> Session 3.2 - Generation and quality assessment of synthetic data to drive the development of AI systems in medical imaging Chairs: Alessandra Manzin, <i>INRiM, Italy</i> Danny Panknin, <i>PTB, Germany</i>
09:00 - 10:40	<i>Kleiner Saal</i> Session 3.3 - Human-Device Interaction in Assistive Technologies for People with Diverse Abilities Chairs: Ludovica Gargiulo, <i>STIIMA - National Research Council, Italy</i> Marisa Pesola, <i>University of Naples Federico II, Italy</i>
09:00 - 10:40	<i>Salon</i> Session 3.4 - Special Event - NxGenBCI 2026 - PART I Chair: Dario Ricciardi, <i>UOC Clinical Neurophysiology - AORN Cardarelli Naples, Italy</i>
09:00 - 10:40	<i>Oberes Foyer</i> Session 3.5 - Special Event AIRevEdu - PART I Chairs: Giacomo di Noto, <i>Università Politecnica delle Marche, Italy</i> Marco Faifer, <i>Politecnico di Milano, Italy</i>



FULL PROGRAM - SESSION DETAILS

This programme provides the name, time, and location of each session. To explore the individual presentations included in each session, scan the QR code on the left to access the **IEEE MetroXRAINE 2026 Padlet**.

10:40 - 11:10	<i>Luxor Conference Center - Unteres Foyer</i> COFFEE BREAK
10:40 - 11:10	<i>Luxor Conference Center - Unteres Foyer</i> DEMO SESSION #2 Chairs: Nicola Moccaldi, <i>University of Naples Federico II, Italy</i> Lorenzo Scalise, <i>Università Politecnica delle Marche, Italy</i>
10:40 - 11:10	<i>Luxor Conference Center - Unteres Foyer</i> POSTER SESSION #2 Coordinators: Ilaria Marcantoni, <i>Università Politecnica Delle Marche, Italy</i> Francesco Caputo, <i>University of Naples Federico II, Italy</i>
11:10 - 12:10	<i>Großer Saal</i> PLENARY SESSION - KEYNOTE LECTURE Chair: Alessandra Angelucci, <i>Politecnico di Milano, Italy</i>

Measuring Motor Behaviors to Guide Interventions in Neurological Conditions

Paolo Bonato, *Massachusetts Institute of Technology, USA*

12:10 - 13:10	<i>Großer Saal</i> PLENARY SESSION - KEYNOTE LECTURE Chair: Pasquale Arpaia, <i>University of Naples Federico II, Italy</i>
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Untethered Intelligence: Why Generative Edge AI Doesn't Need the Cloud

Danilo Pietro Pau, *STMicroelectronics*

12:10 - 13:10	<i>Salon</i> Special Event - NxGenBCI 2026 - PART II Chairs: Dario Ricciardi, <i>UOC Clinical Neurophysiology - AORN Cardarelli Naples, Italy</i> Nicola Moccaldi, <i>University of Naples Federico II, Italy</i>
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13:10 - 14:10

Luxor Conference Center - Unteres Foyer

LUNCH / DEMO SESSION #2 / POSTER SESSION #2

Still presenting Demos of the **Demo Session #2** and Posters of the **Poster Session #2**.

14:10 - 14:40

Luxor Conference Center - Unteres Foyer

DEMO SESSION #2 / POSTER SESSION #2

Still presenting Demos of the **Demo Session #2** and Posters of the **Poster Session #2**.

14:40 - 16:20

Großer Saal

Session 4.1 - Measurements in wearable devices for personal monitoring - PART II

Chairs: Alessandra Angelucci, *Politecnico di Milano, Italy*
Sara Caramaschi, *Malmö University, Sweden*

14:40 - 16:20

Mittlerer Saal

Session 4.2 - Human-Centric AI Decision Support for Patients and Caregivers in Health 5.0

Chairs: Sabatina Criscuolo, *STIIMA - National Research Council, Italy*
Adam Koletis, *Aegean University, Greece*

14:40 - 16:20

Kleiner Saal

Session 4.3 - Quantum Paradigms for AI and Metrology: Redefining Limits in Computation and Sensing

Chairs: Matteo D'Iorio, *University of Naples Federico II, Italy*
Valter Laino, *University of Salerno, Italy*

14:40 - 16:20

Salon

Session 4.4 - Special Event - NxGenBCI 2026 - PART III

Chairs: Calogero Oddo, *Sant'Anna School of Advanced Studies, Italy*
Marie-Constance Corsi, *Paris Brain Institute, Inria, France*



FULL PROGRAM - SESSION DETAILS

This programme provides the name, time, and location of each session. To explore the individual presentations included in each session, scan the QR code on the left to access the **IEEE MetroXRINE 2026 Padlet**.

14:40 - 16:20 *Oberes Foyer*
Session 4.5 - Special Event AIRevEdu - PART II
Chair: Andrea Zingoni, *University of Tuscia, Italy*

16:20 - 16:50 *Luxor Conference Center - Unteres Foyer*
COFFEE BREAK / DEMO SESSION #2 / POSTER SESSION #2

Still presenting Demos of the **Demo Session #2** and Posters of the **Poster Session #2**.

16:50 - 18:30 *Großer Saal*
Session 5.1 - Wearable Biosensing and Artificial Intelligence for Personalized Healthcare
Chairs: Michela Russo, *University of Naples Federico II, Italy*
 Simone Bove, *University of Salerno, Italy*

16:50 - 18:30 *Mittlerer Saal*
Session 5.2 - Special Event - AURA
Chair: Loredana Cristaldi, *Politecnico di Milano, Italy*

16:50 - 18:30 *Kleiner Saal*
Session 5.3 - Artificial Intelligence for Energy Aware Wireless Sensor Networks
Chairs: Christian Viehweger, *Chemnitz University of Technology, Germany*
 Kholoud Hamza, *Chemnitz University of Technology, Germany*

16:50 - 18:30 *Salon*
Session 5.4 - Special Event - NxGenBCI 2026 - PART IV
Chairs: Calogero Oddo, *Sant'Anna School of Advanced Studies, Italy*
 Marie-Constance Corsi, *Paris Brain Institute, Inria, France*

20:00 - 23:00 *Hotel Chemnitzer Hof*
CONFERENCE DINNER



Technical Program - Thursday, Oct 22

08:30 - 17:00	<i>Luxor Conference Center</i> REGISTRATIONS
09:00 - 10:40	<i>Großer Saal</i> Session 6.1 - Continuous Health Monitoring in Free-Living Conditions: From Multi-Parametric Sensing to Actionable Digital Biomarkers Chairs: Gianluca Rho, <i>University of Pisa, Italy</i> Michele Zanoletti, <i>National Research Council, Italy</i>
09:00 - 10:40	<i>Mittlerer Saal</i> Session 6.2 - Beyond Oscillations: Fractal Dimension, Nonlinear Dynamics, and the Future of Neural Engineering Chairs: Camillo Porcaro, <i>University of Padua, Italy</i> Fortuna Galdieri, <i>University of Naples Federico II, Italy</i>
09:00 - 10:40	<i>Kleiner Saal</i> Session 6.3 - Panel - IEEE Women in Engineering - The Smartest in the Room: Scientific Perspectives on AI Safety Beyond Human Cognitive Dominance Chairs: Marisa Pesola, <i>University of Naples Federico II, Italy</i>
09:00 - 10:40	<i>Salon</i> SPECIAL EVENT - YOUTH PROGRAM
10:40 - 11:10	<i>Luxor Conference Center - Unteres Foyer</i> COFFEE BREAK



FULL PROGRAM - SESSION DETAILS

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10:40 - 11:10 *Luxor Conference Center - Unteres Foyer*
DEMO SESSION #3
Chairs: Nicola Moccaldi, *University of Naples Federico II, Italy*
 Lorenzo Scalise, *Università Politecnica delle Marche, Italy*

10:40 - 11:10 *Luxor Conference Center - Unteres Foyer*
POSTER SESSION #3
Coordinators: Luigi Duraccio, *University of Naples Federico II, Italy*
 Celina Kudrin-Gusten, *Mittweida University of Applied Sciences, Germany*

11:10 - 12:10 *Großer Saal*
PLENARY SESSION - KEYNOTE LECTURE
Chair: Olfa Kanoun, *Chemnitz University of Technology, Germany*

Future Communication Networks for Collaborative Robotics

Frank Hanns Paul Fitzek, *TU Dresden, Germany*

12:10 - 13:10 *Großer Saal*
TUTORIAL
Chair: Michael Kuhl, *Mittweida University of Applied Sciences, Germany*

Graphical abstracts - what matters to improve your next one

Norbert Rasch, *Mittweida University of Applied Sciences, Germany*

13:10 - 14:10 *Luxor Conference Center - Unteres Foyer*
LUNCH / DEMO SESSION #3 / POSTER SESSION #3

Still presenting Demos of the **Demo Session #3** and Posters of the **Poster Session #3**.

14:10 - 15:50 *Großer Saal*
Session 7.1 - Metrology-driven AI, Signal Analysis and Healthcare Modeling
Chairs: Vittorio Santoriello, *University of Naples Federico II, Italy*
 Ida Maruotto, *Reykjavik University, Iceland*



14:10 - 15:50	<i>Mittlerer Saal</i> Session 7.2 - General Session - PART I Chairs: Amit Kumar, <i>University of Naples Federico II, Italy</i> Francesco Isgrò, <i>University of Naples Federico II, Italy</i>
14:10 - 15:50	<i>Kleiner Saal</i> Session 7.3 - General Session - PART II Chairs: Alon Ascoli, <i>Politecnico di Torino, Italy</i> Francesco Caputo, <i>University of Naples Federico II, Italy</i>
14:10 - 15:50	<i>Salon</i> Session 7.4 - Beyond Distance: Reliable XR for Telepresence and Remote Interaction Chairs: Franziska Klimant, <i>Technische Universität Chemnitz, Germany</i> Davide Mastrodicasa, <i>Siemens Industry Software NV</i>
15:50 - 16:20	<i>Luxor Conference Center - Unteres Foyer</i> COFFEE BREAK / DEMO SESSION #3 / POSTER SESSION #3 / YOUTH FORUM
Still presenting Demos of the Demo Session #3 and Posters of the Poster Session #3 .	
16:20 - 18:00	<i>Großer Saal</i> Session 8.1 - XR and Measurement Systems for Forensic Reconstruction and Evidence Analysis Chairs: Marie Luise Heuschkel, <i>Mittweida University of Applied Sciences, Germany</i> Svenja Preuß, <i>Mittweida University of Applied Sciences, Germany</i>
16:20 - 18:00	<i>Kleiner Saal</i> Session 8.2 - General Session - PART III Chairs: Maria Cacciapuoti, <i>University of Naples Federico II, Italy</i> Egidio De Benedetto, <i>University of Naples Federico II, Italy</i>



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16:20 - 18:00	<i>Salon</i> Session 8.4 - Advances in Affective Computing and Social Interaction Technologies Chairs: Alberto Greco, <i>University of Pisa, Italy</i> Sergio Frumento, <i>University of Pisa, Italy</i>
18:00 - 18:30	<i>Großer Saal</i> CLOSING AND AWARD CEREMONY
18:30 - 19:00	<i>Luxor Conference Center - Unteres Foyer</i> BRETZEL & BEER - Firewall Party

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