

Programm der Sitzung

28. Juni 2026 bis 2. Juli 2026



ICNCE 2026

Technical Session (Plenary)

Eurogress Aachen, Europa Hall

Mo., 29. Juni

10:00

Technical Session (Plenary): Technical Session (Plenary)

Sitzung | **Ort:** Eurogress Aachen, Europa Hall | **Vorsitzender:** Emre Neftci

10:00–10:50 Uhr

In-Memory Computing for Trustworthy Edge AI: Bayesian Hardware and On-Chip Learning

Sprecher

Frau Elisa Vianello

10:50

11:10

Technical Session (Plenary)

Sitzung | **Ort:** Eurogress Aachen, Europa Hall | **Vorsitzender:** Max Lemme

11:10–11:50 Uhr

Brain-Inspired Memory-Centric Architectures for Ultra-Low Power and Adaptive Edge AI Wearables

Sprecher

David Atienza Alonso

11:50–12:30 Uhr

Enabling Hybrid AI at the Extreme Edge

Sprecher

Marian Verhelst

12:30

16:00

Technical Session (Plenary)

Sitzung | **Ort:** Eurogress Aachen, Europa Hall | **Vorsitzender:** Abigail Morrison

16:00–16:20 Uhr

Simulation-based inference of whole-brain dynamical network models across different levels of complexity

Sprecher

Xenia Kobeleva

16:20–17:00 Uhr

Deterministic, history-weighted gradient flow for global optimization

Sprecher

Zoltan Toroczkai

17:00

Di., 30. Juni

09:00

Technical Session (Plenary): Technical Session (Plenary)**Sitzung** | **Ort:** Eurogress Aachen, Europa Hall | **Vorsitzender:** Giacomo Indiveri

09:00–09:40 Uhr

Reconfigurable Nonlinear Computing in Silicon**Sprecher**

Wilfred van der Wiel

09:40–10:00 Uhr

Trainable structural plasticity with radio frequency spintronic neural networks**Sprecher**

Théophile Rageau

10:00–10:20 Uhr

Insect brain-inspired neuromorphic computing with nanoscale sensory neuron arrays**Sprecher**

Bruno Romeira

10:20

13:30

Technical Session (Plenary)**Sitzung** | **Ort:** Eurogress Aachen, Europa Hall | **Vorsitzender:** John Paul Strachan

13:30–14:10 Uhr

Mapping Intelligence to Silicon**Sprecher**

Natalia Vassilieva

14:10–14:50 Uhr

BrainScaleS – Networks of Analog Neuromorphic Processors**Sprecher**

Johannes Schemmel

14:50–15:30 Uhr

The Promise of Recurrent Depth for Efficient Reasoning**Sprecher**

Jonas Geiping

15:30

Mi., 1. Juli

09:30

Technical Session (Plenary): Technical Session (Plenary)

Sitzung | **Ort:** Eurogress Aachen, Europa Hall | **Vorsitzender:** Regina Dittmann

09:30–10:10 Uhr

Oxide-based memristors and ionic transistors: materials and device engineering for brain-inspired information processing

Sprecher

Sabina Spiga

10:10–10:30 Uhr

A Low-Power Event-Driven Gesture Recognition System Based on MoS₂ Charge Trap Memory Reservoir Computing

Sprecher

Liangyu Chen

10:30

11:00

Technical Session (Plenary): Technical Session (Plenary)

Sitzung | **Ort:** Eurogress Aachen, Europa Hall | **Vorsitzender:** Francesca Santoro

11:00–11:40 Uhr

Mimicking excitability with organic mixed conductors

Sprecher

Simone Fabiano

11:40–12:20 Uhr

Integration Strategies for Organic Neuromorphic Devices

Sprecher

Alberto Salleo

12:20–12:40 Uhr

Road to scalability for efficient graph search on massively parallel neuromorphic hardware

Sprecher

Oskar von Seeler

12:40

15:50

Technical Session (Plenary): Technical Session (Plenary)

Sitzung | **Ort:** Eurogress Aachen, Europa Hall | **Vorsitzender:** John Paul Strachan

15:50–16:30 Uhr

Event-Based Sensing and Computing: Architectures, Challenges, and Towards Unified Frame-Event Representations

Sprecher

Ryad Benosman

16:30–17:10 Uhr

Exploring Energy Dependency within Artificial and Cultured Neuronal Networks.

Sprecher

Pedro Maldonado

17:10

Do., 2. Juli

09:00

Technical Session (Plenary): Technical Session (Plenary)

Sitzung | Ort: Eurogress Aachen, Europa Hall | Vorsitzender: Moritz Helias

09:00–09:40 Uhr

What does brainlike computing mean? And what does mean mean?**Sprecher**

Herbert Jaeger

09:40–10:20 Uhr

Unconventional sensing and perception: using event-driven technologies for robots**Sprecher**

Chiara Bartolozzi

10:20–10:40 Uhr

AudioPrism: Oscillatory frequency decomposition enhances speech recognition through multi-scale temporal processing**Sprecher**

Felix Effenberger

10:40

11:10

Technical Session (Plenary): Technical Session (Plenary)

Sitzung | Ort: Eurogress Aachen, Europa Hall | Vorsitzender: Martin Salinga

11:10–11:50 Uhr

Emerging Memory Integration for Energy-Efficient Edge Computing**Sprecher**

Erika Covi

11:50–12:30 Uhr

Electronics Devices at the Edge of Chaos**Sprecher**

Suhas Kumar

12:30–12:50 Uhr

Forward-only learning in memristor arrays with month-scale stability**Sprecher**

Adrien Renaudineau

13:10