

Session Program

8–12 Sept 2026

Forum Acusticum 2026

***A09.00 Machine learning and artificial intelligence in
acoustics***

Friday 11 September

08:40

A09.00 Machine learning and artificial intelligence in acoustics: S053

Session | Location: Messe Congress Graz, Saal 3 | Conveners: Alois Sontacchi, Martin Hagmüller, Franz Pernkopf, Mirco Pezzoli

08:40–09:00

A Deep Neural Network for Predicting the Sound Field Radiated by Orthogonally Stiffened Plates

Speaker

Manuele Montrasio

09:00–09:20

HERMES: A Physics-informed Hierarchical Mesh Transformer for Real-time Room Eigenfrequency Prediction

Speaker

Bence Bakos

09:20–09:40

Two-stage sound field learning through holomorphic neural networks and Vekua operators

Speaker

Matteo Calafà

09:40–10:00

A neural eigenvalue solver using plane wave representations

Speaker

Matteo Calafà

10:00

09:00

A09.00 Machine learning and artificial intelligence in acoustics: P509

Session | Location: Messe Congress Graz, Messehalle (Poster+Exhibition) | Conveners: Alois Sontacchi, Mirco Pezzoli, Franz Pernkopf, Martin Hagmüller

09:00–12:00

murenn: Multi-Resolution Neural Networks in PyTorch

Speaker

Xiran Zhang

12:00

10:20

A09.00 Machine learning and artificial intelligence in acoustics: S386

Session | Location: Messe Congress Graz, Saal 3 | Conveners: Alois Sontacchi, Martin Hagmüller, Franz Pernkopf, Mirco Pezzoli

10:20–10:40

Dynamic Sound Field Regression via Physics-informed Temporal- Frequency Residual Learning

Speaker

Yuanxin Xia

10:40–11:00

Real-Time Broadband Sound Field Regression via Massively Parallel Frequency Stacking Neural Networks

Speaker

Yuanxin Xia

11:00–11:20

Topological Features for Environmental Sound Classification

Speaker

Jiwon Seo

11:20–11:40

AI-Driven Detection and Acoustic Modeling of Anthropogenic Underwater Noise Across European Marine Basins**Speaker**

Rosa Ma Alsina-Pagès

11:40–12:00

Application of Siamese networks to Anomaly Detection in Multibeam Sonograms For CCS Monitoring**Speaker**

Jonathan Farr

12:00

14:40

A09.00 Machine learning and artificial intelligence in acoustics: S388**Session** | **Location:** Messe Congress Graz, Saal 3 | **Conveners:** Alois Sontacchi, Mirco Pezzoli, Franz Pernkopf, Martin Hagmüller

14:40–15:00

Acoustic classification of packaging waste based on ultrasonic and audible sound wave emissions in reverberant enclosures**Speaker**

Marc Arnela

15:00–15:20

Interpretable Machine Learning for Assessing Environmental and Mounting Effects on Aeronautical Glass Wool Absorption**Speaker**

Alfonso Caiazzo

15:20–15:40

SPSC-HCM-16C: A Multi-Channel Lung Sound Benchmark**Speaker**

Benedikt Mayrhofer

15:40