

Session Program

8–12 Sept 2026

Forum Acusticum 2026

A21.04 Railway noise and vibration

Wednesday 9 September

09:00

A21.04 Railway noise and vibration: P521

Session | **Location:** Messe Congress Graz, Messehalle (Poster+Exhibition) | **Conveners:** Karoline Alten, Christopher Knuth, Slimane Ouakka

09:00–12:00

A Study of the Relationship Between Train Speed and Acceleration Amplitude Based on ABA Measurements

Speaker

Helena Steine Tysland

12:00

09:20

A21.04 Railway noise and vibration: S154

Session | **Location:** Messe Congress Graz, Saal 4 | **Conveners:** Slimane Ouakka, Karoline Alten, Christopher Knuth

09:20–09:40

A blocked force-based approach for railway-induced vibration simulation considering strongly coupled track-soil-building systems

Speaker

Robert Arcos

09:40–10:00

On-Site Measurements of Transfer Functions and Prediction of Vibration Velocity along Lisbon Subway Lines

Speaker

Tatiana Teixeira

10:00–10:20

Exploring Graz by Tram: Monitoring the Network using Vibro-Acoustic Onboard Sensors

Speaker

Karoline Alten

10:20

10:40

A21.04 Railway noise and vibration: S321

Session | **Location:** Messe Congress Graz, Saal 4 | **Conveners:** Slimane Ouakka, Christopher Knuth, Karoline Alten

10:40–11:00

ROLLAND: A New Framework for Realistic and Computationally Efficient Rolling Noise Modeling in the Time Domain

Speaker

Maximilian Mantel

11:00–11:20

Influence of Lateral Wheel-Rail Contact Position on Rolling Noise

Speaker

Chakib Drias

11:20–11:40

Numerical assessment of the contribution of railway sleepers to pass-by noise

Speaker

Slimane Ouakka

11:40

14:20

A21.04 Railway noise and vibration: S322**Session** | **Location:** Messe Congress Graz, Saal 4 | **Conveners:** Slimane Ouakka, Karoline Alten, Christopher Knuth

14:20–14:40

RailNoise: Future-Proofing Norwegian noise calculations with new source data for Nord2000 and Cnossos-EU**Speaker**

Leo Heggem Hauge

14:40–15:00

Semi-virtual assessment of cab signals in trains**Speaker**

Domenico Tallarico

15:00–15:20

Audiovisual investigations of noise abatement measures on their effect on annoyance from rail traffic noise**Speaker**

Martin Czuka

15:20–15:40

Perceptual Impact of Rolling Stock Tonality on Railway Passengers and Nearby Communities: In situ Studies**Speaker**

Joan Sapena

15:40–16:00

Frequency-Modulated and Single-Tone Excitation to Reveal Vibro-Acoustic Nonlinearities in Loosened Bolted Joints**Speaker**

Berkay Kullukcu

16:00