



FORUM ACUSTICUM EURONOISE 2025

Hot topic 3. Perceptual research in acoustics: fundamentals of design, performance and analysis

Organizer: Daniel de la Prida

Organizers and Key Trainers:



Daniel de la Prida holds an MSc in Acoustic Engineering and Vibrations from Valladolid University (2014) and a PhD in Psychoacoustics from the Technical University of Madrid (2021). His master's thesis and doctoral dissertation have both focused on the application of precise listening test protocols and robust analysis techniques for the perceptual assessment of sound in Sound Insulation, Room Acoustics and Soundscapes. Since 2023, Daniel de la Prida has held the position of Assistant PhD Professor at the Technical University of Madrid, in the Department of Audiovisual Engineering and Communications. He previously held the positions of Assistant Professor (2018-2021), Visiting Professor (2021-2022) and Assistant PhD Professor (2022-2023) at the Carlos III University of Madrid. At both universities, Daniel has concentrated his teaching on Acoustic Instrumentation and Noise Control, Digital Audio Processing and Psychoacoustics. In terms of his research, while much of his focus has been on psychoacoustics and perceptual evaluation, he is also actively involved in projects related to the restoration of the acoustics of heritage sites, the acoustic characterization of materials and the application of signal processing techniques for sound measurement using microphone arrays, and the generation of personal sound zones using loudspeaker arrays. Since 2023, Daniel has served on the Executive Board of the Spanish Acoustical Society, and has also acted as Editor of the Journal of Acoustics (Revista de Acústica) of the aforementioned society. Since 2018, he has been the local representative for Spain in the Young Acousticians Network (YAN).



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Simone Torresin is an Assistant Professor in the Department of Civil, Environmental, and Mechanical Engineering at the University of Trento, Italy, and an Honorary Research Fellow at the UCL Institute for Environmental Design and Engineering in London, UK. He completed his MEng in Building Engineering in 2012 at Politecnico di Milano. With a background in acoustic consultancy, engineering within the building industry, and research on Indoor Environmental Quality, he earned his Ph.D. in Civil, Environmental, and Mechanical Engineering with honors in 2022 from the University of Trento, in collaboration with Eurac Research and University College London. Simone's research focuses on the interplay between sensory perception, architecture, and building occupants. His work has advanced soundscape science in indoor built environments and protected natural areas through initiatives like Silenzi in Quota. Within the IEA EBC - Annex 87 on Personalized Environmental Control Systems (PECS), he leads a working group on Acoustic PECS. Additionally, he serves on the Editorial Boards of Indoor Environments (ELSEVIER), Building Acoustics (SAGE) and Acoustics (MDPI).



Dr Antonio J Torija Martínez is a world leading expert in perception-driven research on aircraft noise. His main research interests are in aircraft noise measurement and modelling, noise metrics, and psychoacoustics. He is currently focused on the development of psychoacoustic modelling tools for drones and ducted fan propulsion systems. He has published about 48 peer-reviewed journals including in Nature, and more than 40 conference papers (h-index=27 and i10-index=40). He has extensive experience in multidisciplinary research (e.g., collaboration with MIT and UCL in the SAECA-EPSRC Institutional Sponsorship Award'). He is currently PI of the EPSRC project DroneNoise (EP/V031848/1), and leading psychoacoustic research in the InnovateUK project InCEPTion (ref. 73692), and Horizon Europe REFMAP (ref. 101096698) and ImAFUSA (ref. 10080939). Before that, he has been the recipient of a prestigious Marie Curie EU Postdoctoral Fellowship, and has been involved in several InnovateUK (refs. 113013 and 113086), EPSRC (EP/M027031/1), and industry (Airbus Collaborative University Challenge on



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Aircraft Noise Annoyance) funded projects. He is a Human Response and Metrics expert in the NASA Urban Air Mobility Noise Working Group, and a member of the NATO AVT-414 on Acoustics Mission Planning and Environmental Impact Analysis for UAS and UCA (<5000kg). He was a UK representative in the Joint ISO/TC 20/SC 16 - ISO/TC 43/SC 1 WG leading to the development of the ISO 5305:2024 - Noise measurements for UAS (Unmanned Aircraft systems). Dr Torija Martinez is currently the Chair of the Organising Committee of the QuietDrones 2024 international conference (<https://www.quietdrones.org/>).

In February 2023, Dr Torija Martinez acted as an expert witness in environmental noise to give oral evidence to the House of Lords Science and Technology Committee, for a public inquiry on the impacts of noise pollution on human health (<https://committees.parliament.uk/committee/193/science-and-technology-committee-lords/news/196536/light-and-noise-pollution-are-neglected-pollutants-in-need-of-renewed-focus/>). During this inquiry he provided evidence about the state-of-the-art in environmental acoustics and described the research and policy gaps to be addressed.