

## Newsletter's Summary

### Agenda

Get a reminder on upcoming events and deadlines. Feel free to contribute if you become aware of any change!

### News

This month we delve into the highlights of Le Mans Sonore 2024, the Immersive Audio Academy seminar organised by AES, and WES Lottie Tour :)

### Job announcements

Find your dream job in this fresh list of opportunities! If you wish to announce a position, please email the YAN team.

### Publications

This month discover a publication on a theoretical model for predicting the acoustic field scattered by an elastic cylinder from Miad Al Mursaline.

## Upcoming Events

### November 2023

- 14<sup>th</sup>-16<sup>th</sup>      Reproduced Sound 2023  
Audio accessibility - the ingredients for success. [Bristol, UK](#)
- 17<sup>th</sup>              25th Meeting of the Portuguese section of the Audio Engineering Society  
[Portalegre, Portugal](#)

### December 2023

- 04<sup>th</sup> - 08<sup>th</sup>      Acoustics 2023 Sydney  
[Sydney, Australia](#)
- 13<sup>th</sup> (online)    Webinar – Echolocation: the commercial application for ultrasound analysis
- 13<sup>th</sup>              Third Underwater Acoustics PhD Symposium Day  
[Southampton, UK](#)

### January 2024

- 17<sup>th</sup> - 19<sup>th</sup>      Anglo-French Physical Acoustics Conference 2024 (AFPAC)  
[Loch Lomond, Scotland](#)
- 26<sup>th</sup>              LE MANSSONORE 2024  
Le Mans Sonore 2024 "Acoustics Awards". [Le Mans, France](#)



## December 2023

15<sup>th</sup> - Aeroacoustics SIG Conference

Manchester, England. [Abstract Submission](#)

## January 2024

05<sup>th</sup> - LE MANSSONORE 2024

Le Mans Sonore 2024 "Acoustics Awards". Le Mans, France. [Registration deadline](#)

31<sup>st</sup> - ICUA 2024

50<sup>th</sup> International Conference on Underwater Acoustics. Bath, UK. [Abstract Submission](#)

31<sup>st</sup> - BNAM 2024

Baltic-Nordic Acoustic Meeting 2024. Hanasaari, Espoo, Finland. [Abstract Submission](#)

# News



## Le Mans Sonore 2024

The acoustics and sound design competition, Le Mans Sonore, is expecting your most creative project to be awarded. You can submit either original research in fundamental and applied acoustics or your best sound creation. The point is to bring together science and culture in a one-of-a-kind sound festival! Check out the competition rules here! [here](#).

## Impact Sound Insulation of balconies

With the increasing urban densification, balconies are gaining in popularity as they improve the living quality in homes. Since graduating in 2019, Lucas Heidemann has been working on the impact sound insulation of thermally insulated balconies. What sounds like a rather uninteresting topic is actually a wide field of different engineering tasks, including the development of test rigs, simulations, measurements both on the test rig and in buildings, and standardisation. Future work will also focus on the perception of people walking on balconies and access balconies, where poor impact sound insulation can be very annoying. He will be giving a presentation on [this topic](#) on the 27 November at 13:00

## “Immersive audio, OK. But what format?”

Did you hear about the Immersive Audio Academy seminar organised by AES? If you are interested in spatial audio and particularly in the different audio formats used, you could join [this](#) seminar online, hearing from world-known specialists.

## WES Lottie Tour

Did you meet Lottie? WES Lottie Tour is an annual campaign that takes 'Lottie' to many different locations accompanying lots of different engineers. The primary aim for the campaign is to inspire and encourage youngsters to pursue a career in STEM subjects. This year, the Institute of Acoustics has joined in to promote the world of acoustics by showing some exciting day to day activities of many acousticians. Check out the fun [video](#) to see where Lottie went and maybe decide to participate in the coming year! Was your job captured in the video?

# Announcement!

We've just launched our Mastodon account

Join the conversation and connect with YAN's vibrant community on Mastodon

[@eaa\\_yan@fediscience.org](mailto:@eaa_yan@fediscience.org), [https://fediscience.org/@eaa\\_yan](https://fediscience.org/@eaa_yan) ]!

Mastodon is free and open-source software, runs on completely independent servers (we chose [fediscience.org](#)) which interoperate with others with open web protocols to form one global social network. No ads, no push profiles.

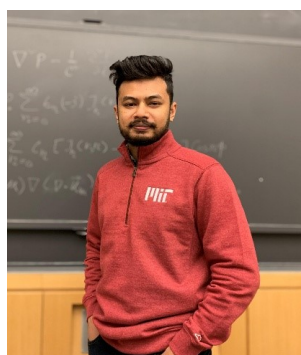
To create an account: <https://joinmastodon.org/>

**Technical Sound Designer for VR Experiences**UNIVRSE. [Barcelona, Spain](#)**Acoustician for vehicle acoustics, NVH and technical sound insulation**AKUVIB Engineering and Testing GmbH [Bochum, Germany](#).**Junior/Graduate Acoustic Consultant**  
Scotch Partners. [London, UK](#).**Graduate Acoustic Consultant**  
Clement Acoustics. [London, UK](#).**Master Student Internship: Frequency-Dependency of Nonlinear Acoustic Properties of Concrete**Université Gustave Eiffel. [Nantes, France](#).**University Assistant for Sonic Interaction Design**University of Music and Performing Arts Graz. [Graz, Austria](#).**Consulting engineer for civil and room acoustics**Müller-BBM Group. [Berlin, Germany](#).

## Publications

**Acoustic scattering by smooth elastic cylinders insonified by directional transceivers: Monostatic theory and experiments**

A theoretical model for predicting the acoustic field scattered by an elastic cylinder that is partially insonified by a directional transceiver is proposed in the form of a simple approximate one-dimensional integral. This model accounts for spherical spreading and directivity of the incident waves and extends the formulation used in a preceding article [Gurley and Stanton, J. Acoust. Soc. Am. 94, 2746-2755 (1993)] by including effects due to oblique insonification of a long cylinder assuming negligible end-contributions. The scattered field of an infinitely long cylinder for obliquely incident plane waves and point receivers is used to approximate the apparent volume flow of cylinders partially insonified by directional transceivers. The scattered pressure that is derived using the apparent volume flow, in contrast to the previous formulation, is capable of predicting axially propagating guided wave resonances; these natural modes are excited, in addition to circumferential ones, at off-normal incident angles. The model is compared with exact numerical simulations and with previously published as well as new laboratory data. The analysis illustrates the different realistic effects associated with scattering from elastic cylinders insonified by a directional transceiver both theoretically and experimentally.

**About the Author**

Miad Al Mursaline is a Ph.D. student in the joint program between Massachusetts Institute of Technology (MIT) and Woods Hole Oceanographic Institution (WHOI). His home departments at MIT and WHOI are Mechanical Engineering and Applied Ocean Physics and Engineering, respectively. His current research involves developing physics-based acoustic scattering models for underwater targets and conducting acoustic scattering experiments in the laboratory. He has been primarily investigating the effects of directional sonars on scattering from statistically smooth and rough elastic cylinders.

