



## 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 highlight the bimonthly newsletter issue from Nuntius :)

### 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 exploring level- and spectrum-based music mixing transforms for hearing-impaired listeners.

## Upcoming Events

### 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 MANS SONORE 2024  
Le Mans Sonore 2024 "Acoustics Awards". [Le Mans, France](#)

### February 2024

7<sup>th</sup> Aeroacoustics SIG Conference  
[Manchester, England](#)

## Upcoming Deadlines

### December 2023

15<sup>th</sup> - Aeroacoustics SIG Conference  
Manchester, England. [Abstract Submission](#)

31<sup>th</sup> - 9th triennial conference of the International Association of Building Physics (IABP)  
Toronto, Canada. [Abstract Submission](#)

### January 2024

05<sup>th</sup> - LE MANS SONORE 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  
50<sup>th</sup> Baltic-Nordic Acoustic Meeting 2024. Hanasaari, Espoo, Finland. [Abstract Submission](#)

### February 2024

9<sup>th</sup> - INTER-NOISE 2024  
53th International Congress and Exposition on Noise Control Engineering. Nantes, France [Abstract Submission](#)

## News

### EAA newsletter Nuntius

The European Acoustics Association (EAA) has published the November/December issue of Nuntius, its bimonthly newsletter, covering a variety of topics including:

- Endorsements and promotions for upcoming events, conferences, seminars, workshops, and webinars related to acoustics
- Acoustic literature reviews of recent publications or books. Interested authors can simply send an email to [eea@euroacoustics.org](mailto:eea@euroacoustics.org) expressing their interest and sharing details about their publication. The EAA diligently matches each book with a qualified reviewer to ensure a comprehensive analysis.
- Highlights from "Acta Acustica," a reputed "Open Access" scientific journal focusing on acoustics.

Have a look [here](#) for more information :)

### 2024 AES International Acoustics & Sound Reinforcement Conference:

The AES International Conference in Acoustics and Sound Reinforcement is happening this coming year in Le Mans, France between 23-26 of January. You can still register to hear about the latest innovations in immersive audio, system designs or simply transducers. Check out their programme!

### UKAN+ Aeroacoustics SIG Conference:

Are you interested in aeroacoustics? Then keep an eye on the Aeroacoustics SIG Conference in Manchester. A preliminary programme will be made public on January 19th with contributions ranging from fundamentals to applications of aeroacoustics?

### Acta Acustica Topical Issue:

The Acta Acustica topical issue on numerical, computational and theoretical acoustics is now open for submission! Based on the impact and novelty of your Forum Acusticum paper and presentation, you may be invited to submit an extended version. Keep an eye on your email!

## A farewell to 2023

The end of the year is approaching quickly, and a retrospective is almost expected. The YAN has been changing and evolving, bringing all of us together to share knowledge and experiences. Whether you joined us online or in person for one of this year's events and programs, we thank you for becoming a part of our network! On behalf of the YAN team, we wish you all a wonderful Christmas break and an extraordinary new year! We hope to see you all at our future events to celebrate your achievements with all the wonderful young acousticians around the world! .

## Job Announcements

Audio Simulation CAD engineer  
JLR. [Budapest, Hungary](#)

Audio Simulation and Test engineer  
JLR. [Budapest, Hungary](#).

Junior/Graduate Acoustics Consultant Opportunities in Acoustics at  
Scotch Partners. [London, UK](#).

Different Levels  
Apex Acoustics. [London, UK](#).

Development Engineer Digital Audio  
Signal Processing - Voice  
Communication  
Sennheiser. [Wedemark, Lower Saxony, Germany](#)

Stage: Brass instrument bore  
optimization via Machine Learning  
and physics-based sound simulations  
Laboratoire des Sciences du Numérique de Nantes  
[Nantes, France](#).

Development Engineers Audio-Coding  
Sennheiser. [Wedemark, Lower Saxony, Germany](#)

Implementation Specialist Audio DSP  
Sennheiser [Wedemark, Lower Saxony, Germany](#).

Development Engineers Audio-Coding  
Sennheiser. [Wedemark, Lower Saxony, Germany](#)

PhD in Bioacoustic AI  
Sorama. [Germany, France, Belgium, Netherlands, Finland](#)

## Publications

### Exploring level- and spectrum-based music mixing transforms for hearing-impaired listeners

Multitrack mixing is an essential practice in modern music production. Research on automatic-mixing paradigms, however, has mostly tested samples of trained, normal hearing (NH) participants. The goal of the present study was to explore mixing paradigms for hearing-impaired (HI) listeners. In two experiments, the mixing preferences of NH and HI listeners with respect to the parameters of level-to-accompaniment level ratio (LAR) and the low to high frequency spectral energy balance were investigated. Furthermore, preferences of transformed equalization (EQ-transform) were assessed, achieved by linearly extrapolating between the power spectrum of individual tracks and a reference spectrum. Multitrack excerpts of popular music were used as stimuli. Results from experiment 1 indicate that HI participants preferred an elevated LAR compared to NH participants but did not suggest distinct preferences regarding spectral balancing or EQ-transform. Results from experiment 2 showed that bilateral hearing aid (HA) disuse among the HI participants yielded higher LAR values, stronger weighting of higher frequencies, as well as sparser EQ-transform settings compared to a condition with HA use. Overall, these results suggest that adjusting multitrack mixes may be a valuable way for making music more accessible for HI listeners.

### About the Author



Aravindan Joseph Benjamin, an audio engineer by specialty, obtained a Bachelor of engineering degree in electronic and communication engineering at the Northumbria University in the United Kingdom and a Master of Science degree in electronic media technology at the Technical University of Ilmenau in Germany. His areas of expertise include: music signal processing, psychoacoustics, head-tracking-based dynamic binaural auralization of virtual room acoustics, algorithms for the simulation of virtual room acoustics, audio coding and compression, and electroacoustics. He is currently pursuing his doctorate in music processing for hearing impaired listeners at the music perception and processing laboratory at the Carl von Ossietzky University in Oldenburg, Germany. Prior to starting his doctorate, he was employed at the cognitive systems laboratory at the faculty of sciences of Chemnitz University of Technology before which he was engaged in a state-funded project researching the novel, fully printed paper loudspeakers at the print and media technologies department also at the Chemnitz University of Technology.