

Young Acousticians Network Newsletter #120 February 2023



Newsletter's Summary

Agenda page 2



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

News page 5



We have some exciting updates on Forum Acusticum 2023, the YAN training day and some possible future events...!

Job announcements page 7



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

Publications page 8



This month discover a publication on our moving heads, spectral cues and sound localization.

Board's Highlights



FA2023 updates, EAA history, YAN events, updates to our contacts...! There's so much we can list, have a look!

Page 5



This month find a publication by the University of Antwerp and the Austrian Academy of Sciences.

Page 8





Upcoming Events



March 2023

6th - 9th — DAGA 2023 — 49th Annual Conference on Acoustics. Hamburg, Germany.



April 2023

19th - 21st — USS 2023 — Urban Sound Symposium 2023. Barcelona, Spain.









Upcoming Deadlines



February 2023

10th — IN 2023 — Internoise 2023. Chiba, Japan. Abstract submission.



15th — ICSV 2023 — The 29th International Congress on Sound and Vibration. Prague, Czech Republic. Paper submission.



15th — DAGA 2023 — 49th Annual Conference on Acoustics. Hamburg, Germany. **Abstract submission**.



15th — Forum Acusticum 2023 — 10th Convention of the European Acoustics Association. Torino, Italy. **Abstract submission**.



28th — USS 2023 — Urban Sound Symposium 2023. Barcelona, Spain. **Abstract submission**.



March 2023

1st — CeLyA 2023 — CeLyA Summer School 'Hearing in Noise'. Lyon, France. Abstract submission.



10th — I3DA 2023 — International Conference on Immersive Audio and 3D Audio. Bologna, Italy. Abstract submission.



31st — **DAGA 2023** — 49th Annual Conference on Acoustics. Hamburg, Germany. **Paper** submission.







Upcoming Deadlines



28th — ICU **2023** — International Congress on Ultrasonics. Beijing, China. Abstract submission.



April 2023

14th — ICBEN 2023 — 14th ICBEN Congress on Noise as a Public Health Problem. Belgrade, Serbia. Paper submission.



14th — WTN 2023 — International Conference on Wind Turbine Noise. Dublin, Ireland. **Paper submission.**



30th — Forum Acusticm 2023 — 10th Convention of the European Accustics Association. Torino, Italy. **Paper submission**.



May 2023

19th — IN 2023 — Internoise 2023. Chiba, Japan. Paper submission.



21st — AAAA 2023 — 10th Congress of the Alps Adria Acoustics. Izola, Slovenia. Abstract submission.



Announce here!

Your company opened a position related to acoustics?

Announce it here and reach young acousticians all over Europe! Contact us through:

eaa.yan@euracoustics.org





News



Forum Acusticum 2023 abstract dealine extension

Didn't have enough time or forgot to submit an abstract to Forum Acusticum? Good news! The submission deadline has been postponed to February 15th, 2023. Submit at:

https://www.fa2023.org/

Urban Sound Symposium

Following the successful first two Urban Sound Symposia held in 2019 and 2021, the third edition in 2023 will be locally organized by researchers at La Salle Campus Barcelona. The symposium will present the newest developments, challenges and opportunities for urban sound. Find out more at:

https://urban-sound-symposium.org/

A conversation with Michael Vorländer

During the YAN training weekend in October 2022, we had the pleasure of talking to Michael Vorländer, former EAA president, vice-president and Executive Council member, about the history and functioning of the European Acoustics Association. We would like to share with you a fun snippet from this very insightful conversation.





News



The founding of the EAA was a long process. The legal registration was in 1992, but discussions had started from 1987.

The main goal for the EAA at the time was to have an own journal, Acta Acustica, of which the first volume was published in 1993. There was some competition with ACUSTICA, the journal of the Hirzel publishers in Stuttgart since 1951. This led to merging in 1996 under the slightly confusing name "ACUSTICA united with Acta Acustica", later re-named as "Acta Acustica united with ACUSTICA".

Since 2020, we have the digital open access journal again named <u>Acta Acustica</u>, published under EDP Sciences. ACUSTICA, however, was discontinued.

A Wikipedia "Hackathon"?

During the International Year of Sound during 2020 and 2021, there were some activities in groups doing Wikipedia hackathons for an afternoon. They would check what articles there were on acoustics and edit them together as a social activity. It seems like a fun tradition for the YAN to perhaps continue: to let young acousticians learn together and in the process provide reliable public online information about acoustics. Is this something that you would enjoy? <u>Contact us</u> and let us know!

New YAN email

The EAA has been making some upgrades on the internal workings of the association and corresponding products. The YAN email has been updated and you can now contact us at:

eaa.yan@euracoustics.org





Job Announcements



PhD Position - SONORA: Filling the gap. Universidada de Alicante. San Vicente del Raspeig, Spain.



Development Engineer Digital Audio Signal Processing. Senheiser. **Wedemark, Germany.**



Technician in Acoustics. Simon-Christiansen & Associés. Contern, Luxembourg.



Acoustic Consultant - Noise & Vibration. Hann Tucker Associates. **Manchester, England.**



PhD Position - Smart & Multifunctional Structures. PIMM Laboratory. Paris, France.



PhD Position - Metamaterials Application in Environmental noise. Université Gustave Eiffel-Cerema. **Nantes, France.**



Audio DSP Engineer. Fusemachines. Lisbon, Portugal.



Ultrasound and Acoustics Scientist. TMC. **Eindhoven, Netherlands.**



PhD Position - Statistical Signal Processing. Aalto University. Espoo, Finland.



Postdoctoral Fellowship - Building Acoustics. NTNU. Trondheim, Norway.







Publications



Dynamic spectral cues do not affect human sound localization during small head movements

Natural listening involves a constant deployment of small head movement. Spatial listening is facilitated by head movements, especially when resolving front-back confusions, an otherwise common issue during sound localization under head-still conditions.

The present study investigated which acoustic cues are utilized by human listeners to localize sounds using small head movements (below ±10° around the center). Seven normalhearing subjects participated in a sound localization experiment in a virtual reality Four acoustic stimulus environment. cue conditions were presented (full spectrum, flattened spectrum, frozen spectrum, free-field) under three movement conditions (no movement, head rotations over the yaw axis and over the pitch axis). Localization performance was assessed using three metrics: lateral and polar precision error and front-back confusion rate. Analysis through mixed-effects models showed that even small yaw rotations provide a remarkable decrease in front-back confusion rate. whereas pitch rotations did not show much of an Furthermore. effect. MSS cues improved localization performance even in the presence of dITD cues. However, performance was similar between stimuli with and without dMSS cues. This

indicates that human listeners utilize the MSS cues before the head moves, but do not rely on dMSS cues to localize sounds when utilizing small head movements.

About the Author

Glen McLachlan is a third year doctoral candidate at the Active Perception Laboratory, affiliated with the University of Antwerp in Belgium. His current research involves the role of dynamic cues in the sound localisation process of humans. The objective of his project is to develop an idealobserver model that can describe and predict sound localisation involving head movements. The project is carried out in collaboration with the Acoustics Research Institute in Vienna.

> Authors: Glen McLaghlan, Piotr Majdak, Jonas Reijniers, Michael Mihocic, Herbert Peremans

Affiliation: University of Antwerp, Austrian Academy of Sciences

Contact:

glen.mclachlan@uantwerpen.be



Published in Frontiers in Neuroscience 17:1027827 (2022) DOI: 10.3389/fnins.2023.1027827