

# Young Acousticians Network Newsletter #109 March 2022



# Newsletter's Summary

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

#### News page 5



Find out more about the news from our social media team and meet our latest board member!

#### Job announcements page 7



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

#### Publications page 8



This month discover a publication about noise measurement methods in primary educational facilities.

# Board's Highlights



Exciting news about our upcoming social media posts! Have a look at the details for "The Acoustics of Ancient Theatres" Symposium

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This month read a publication from the IHTA from RWTH Aachen University based in Aachen, Germany.

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# **Upcoming Events**



#### March 2022

21<sup>st</sup> - 24<sup>th</sup> — DAGA 2022 — Deutschen Arbeitsgemeinschaft für Akustik 2022. Hybrid, Stuttgart, Germany.



23<sup>rd</sup> — DecoWind — How to improve noise from future windfarms - Learnings from DecoWind project. Hybrid, Denmark.



#### **April 2022**

15<sup>th</sup> — CFA 2022 — Congrès Français d'Acoustique 2022. Marseille, France.



#### **May 2022**

7<sup>th</sup> - 11<sup>th</sup> — EUROREGIO/BNAM 2022 — EUROREGIO / BNAM 2022. Aalborg, Denmark.



**18<sup>th</sup> - 20<sup>th</sup> — IMA:MSP —** 12<sup>th</sup> IMA International Conference on Mathematics in Signal Processing. **Birmingham, UK.** 



25<sup>th</sup> - 27<sup>th</sup> — AIA 2022 — 48<sup>th</sup> AIA National Conference. Matera, Italy.







# Upcoming Deadlines



#### **March 2022**

4<sup>th</sup> — ICUA 2022 — International Conference on Underwater Acoustics. Southampton, UK. Abstract submission.



**15<sup>th</sup> — ICA 2022 —** International Congress on Acoustics. Geongju, Korea. **Abstract submission**.



**15<sup>th</sup> — FIA 2020-2022 —** 12<sup>th</sup> Ibero-American Acoustics Congress. Florianópolis, Brazil. **Abstract submission**.



23<sup>rd</sup> — EUROREGIO/BNAM 2022 — EUROREGIO / BNAM 2022. Aalborg, Denmark. Paper submission.



31st — AIA 2022 — 48th AIA National Conference. Matera, Italy. Paper submission.



**31<sup>st</sup>— DAGA 2022 —** Deutschen Arbeitsgemeinschaft für Akustik 2022. Stuttgart, Germany. **Paper submission**.



**31**st — **AAT 2022** — The Acoustics of Ancient Theatres. Verona, Italy. **Paper submission**.



**31**<sup>st</sup> — **IMA:MM** — IMA Maths in Music Conference. London, UK. **Abstract submission**.







# **Upcoming Deadlines**



#### **April 2022**

**22<sup>nd</sup> — IWAENC 2022 —** 17<sup>th</sup> International Workshop on Acoustic Signal Enhancement. Bamberg, Germany. **Paper submission**.



**27**<sup>th</sup> — ICUA 2022 — International Conference on Underwater Acoustics. Southampton, UK. Paper submission.



**29<sup>th</sup> — Internoise 2022 —** 51<sup>st</sup> International Congress and Exposition on Noise Control Enfgineering. Glasgow, UK. **Paper submission**.



# Publication contributions



Hi all, we're looking for **new publications to be included in our newsletter**! If you'd like to have your article featured, drop us a message on **discord**! Just click the link above!





#### News



#### **YAN Social Media Update**

Starting in March, we will be dedicating social media posts to a specific field within acoustics on a monthly basis. This will be done with the help of the expertise and insight of the EAA technical committees, to provide you with the most interesting facts about their fields. Keep your eyes peeled on our social media channels!

If you're interested in joining the Social Media team to help us share the best content possible, please send an email to <a href="mailto:yan@euracoustics.org">yan@euracoustics.org</a>

#### Meet our latest Board Member!

As of March, our board will be complemented by **Giuseppina Puglisi**, our new <u>External Affairs Manager</u>! This means that Giusi will be helping connect the national acoustics societies with us and each other.

#### **Symposium: "The Acoustics of Ancient Theatres"**

The EAA Symposium on "The Acoustics of Ancient Theatres" will be held in Verona, Italy, from 6 to 8 July 2022.

The Symposium aims to bring together experts to present and discuss all aspects related to the acoustic properties of these monuments which are often still used for public performances including opera, drama, speech and music.





#### News



The following important deadlines should be kept in mind:

- 15<sup>th</sup> March 2022: Notification of acceptance of abstracts.
- 31st March 2022: Deadline for short paper submission.
- 15<sup>th</sup> April 2022: Deadline for regular registration.
- 15<sup>th</sup> May 2022: Final program.

To submit your abstract, first register online at <a href="https://acustica-aia.it/en/">https://acustica-aia.it/en/</a> and then submit your abstract at the symposium web page: <a href="https://acustica-aia.it/en/event/">https://acustica-aia.it/en/event/</a> <a href="https://acustica-aia.it/en/event/">verona2020/</a>.

Additional information can be found at <a href="https://acustica-aia.it/en/event/">https://acustica-aia.it/en/event/</a>
verona2020/

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# New discord channels



Hey everyone, our new software help text channels are now active on discord! If you have any questions about **Raven**, **Cadna**, **CATT-Acoustics**, **Matlab** and **COMSOL**, just pop them there!





#### Job Announcements



PhD Position. Le Mans University. Le Mans, France.

PhD Position. dBwave.i Acoustic Engineering. Lisbon, Portugal.



Researcher. Centre Tecnològic de Catalunya. Catalunya, Spain.



**R&D Engineer.** Alstom. **Valenciennes, France**.



Software Engineer in Aeroacoustics. Cadence Design Systems. Brussels, Belgium.



Post Doc Position. Technische Universiteit Delft. Delft, Netherlands.



PhD Position. Teesside University. Middlesbrough, UK.



**Early Stage Researcher.** University of Music and Performing Arts Vienna. **Vienna**, **Austria**.



**PhD Position.** University of Music and Performing Arts Vienna. Vienna, Austria.



Post Doc Position. University of Music and Performing Arts Vienna. Vienna, Austria.







# Publications



# Toward Child-Appropriate Acoustic Measurement Methods in Primary Schools and Daycare Centers

Children spend a considerable amount of time in educational institutions, where they are constantly exposed to noisy sound environments, which has detrimental effects on children's health and cognitive development.

Extensive acoustics room measurements and long-term in-situ measurements in such institutions are scarce and are generally conducted using omnidirectional microphones. This study provides preliminary results of room acoustics in unoccupied conditions and in-situ noise measurements during occupancy, in classrooms and playrooms in Germany using an omnidirectional microphone, an adult HATS (head and torso simulator), and a child HATS.

The results indicate that room acoustics of most of the sampled rooms need improvement (mid-frequency reverberation time, T 30 (s) = 0.6 (0.3-1.1) and clarity index, C 50 (dB) = 6.1 (1.6-10.4); speech transmission index (STI) = 0.7 (0.6-0.8); mean values and range); the sound pressure level (SPL) during activities was

around 66 dB (A-weighted equivalent level SPL) in both classrooms and omnidirectional playrooms using measurements, which is somewhat lower similar measurements in other countries that varied in measurement periods: psychoacoustics parameters relating to sound fluctuation (fluctuation strength and roughness) show variation with increasing room volumes; and that there may be some benefit in considering child HATS for in-situ noise measurements.

While the validity of these results in relation to children's perceptual evaluation (using questionnaires, etc.) is subject to future investigations, the results highlight some of the nuances in the choice of transducers measurements with in children and potential benefits of psychoacoustic in parameters the complementing SPI -based parameters in more comprehensively characterizing the noise environments in educational institutions.

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# Publications



#### **About the Author**



Karin Loh is a research assistant and chief engineer at the Institute for Hearing Technology and Acoustics at RWTH

Aachen University. She started her PhD project in 2017 after receiving her master's degree in electrical engineering, majoring in Biomedical Engineering, from RWTH Aachen University, Germany. Her current research focuses on children's hearing and cognition in noisy sound environments within pre- and primary schools. She aims to bring these complex acoustic scenes into controlled laboratory experiments appropriate for very young children aged 3-10 years old.

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