

Europe's Eighth

Student 3D Audio Production Competition

2024

We happily announce the call for Europe's Eighth Student 3D Audio Production Competition, and IEM Graz will host the event in cooperation with vdt (German tonmeisters) via live internet stream, globally live-distributed academic live breakout venues, to award, honour, and present the final ranks of the finalists in a public ceremony around November 2024, complemented by on-demand browser playback via Cat3DA.

Also this year, the Austrian ORF Ö1 radio station and its contemporary music festival ORF musikprotokoll will be our partners to host a pre-final public presentation (Oct. 3th, 2024) of the category 1 finalists at Dom im Berg, Graz.

We encourage all students who deal with spatial music, spatial recording, or who are interested in spatialized sound to participate by submitting short works to the Eighth Student 3D Audio Production Competition for one of the three categories¹:

- 1. Contemporary / Computer music** (11min)
- 2. Audio drama / Documentary / Soundscapes** (4min)
- 3. Music recording / Studio production** (4min)

¹The categories can also be seen as being related to academic subjects such as (1) composition, computer music, sound studies, ..., (2) sound design, audio recording engineering, media design, ... (3) audio recording engineering, sound design, music production, ...

1 Submission format and guidelines

In order to make the entry of the competition accessible to everyone, we chose the scene-based format Ambisonics as the required playback format. It allows playback on various loudspeaker layouts, so that the jury is able to review the contributions on the 3D playback environment they are familiar with, which we can support as organizers. Additionally, Ambisonics conveniently permits distribution to a wider audience over the internet via (dynamic) binaural renderings of the 3D audio contents. There is a variety of free tools including DAWs, encoders, effects and decoders and many more available to create high-quality content in the 3D Ambisonic format. A list of tools and a template session in Reaper that are free and offered by IEM can be accessed under <https://iaem.at/ambisonics/s3dapc/2024>, but of course also other available tools can be used.

We also encourage submissions that were originally produced in channel- or object-based formats (e.g. ADM, Atmos). To convert such productions to Ambisonics, decode them first to a virtual high-density loudspeaker setup (e.g. 9.1.6, 22.2) and encode the virtual loudspeaker signals at their positions to Ambisonics using e.g. the IEM MultiEncoder.

In order to ensure format consistency, *please use the template session provided with binaural headphone playback*, and check consistency of the directions, also using the EnergyVisualizer (e.g. Spat5 uses a coordinate definition rotated by 90° around z), and please provide your submission and details about it in the following way at the easychair submission platform (see Sec. 4 Where to Submit):

- Use 5th order Ambisonics (36 channels) with the ambiX convention (ACN sorting order, SN3D)
 - only upper hemispherical content is considered for playback
 - 48kHz sampling rate and 24bit resolution
- Speech announcements (“front”, “left”, “right”, “rear”, “top”) should be used to sound-check the spatial orientation of the piece
- Duration of contributions to **category 1** should be **11 minutes** maximum
- Duration of contributions to **categories 2 and 3** should be **4 minutes** maximum
- Title + Abstract (**max 200 words**) description of the work
- Upload your contribution to an online file-sharing that the organizers can access
- Place the file-sharing link in the field “download link”
- Write a documentation of the work (**at least 3 pages, may contain photos/images/diagrams**)
- Upload the documentation to the submission platform

2 The procedure

An international jury of recognized experts in the respective categories (spatial audio recording, computer music, and audio technology) will review the contributions. The nominated (top-3) of every category will be **presented and discussed** by jury and authors at the finals in Nov. 2024, where the final ranks (Gold, Silver, Bronze) in every category will be fixed and communicated to the authors of the respective works, publicly.

To promote the contemporary discipline, the finalists (top 3) in category 1 will moreover be presented publicly on Oct 3th, 2024, at Dom im Berg, Graz, within the ORF musikprotokoll festival.

The finals of **Europe's Eighth Student 3D Audio Production Competition** are planned to be a hybrid event in Graz, and to make it a common celebration around the world, we will also enable break-out listening sessions to organizations with loudspeaker facilities, which are connected via the live stream transmission between listening to the Ambisonic playback together, locally. (For reference to the previous event, see <https://tonmeister.org/en/rubrics/3d-audio-competition/2023/>)

If your work is among the nominees for the top ranks in your category, you will be notified, asked to join the event, and asked to prepare a brief video presentation (3-5min) for the ceremony. The nominees will be awarded prizes sponsored by generous companies that deal with 3D audio tools and hardware.

3 Eligibility and important notice

Authors of works submitted to the competitions should be able to confirm their enrollment as a student of a university or higher education program. Authors of the respective works will be asked to permit publishing of the works under the creative commons license (CC0 1.0). The idea behind the recording competition is clearly non-commercial, which should technically allow the interested authors to use academic facilities (which are strictly non-commercial).

4 Where to submit

Please navigate to <https://easychair.org/conferences/?conf=s3dapc2024> and create an account if you haven't got one already. Then, use the link "*enter as an author*" to add your submission to the event and don't forget to provide the **download link**. Submission deadline will be June 30th, 2024.

Best of luck!