

Tuesday 27th:

19:00 gathering in Patio restaurant in Oldenburg (Bahnhofstraße 11, 26122 Oldenburg)

Wednesday 28th, Nussy Building (Küpkersweg 74, 26129 Oldenburg):

9:00 – 9:15 Welcome Steven and Janina

9:15 – 10:30 Presentation Steven

Zoom LINK: <https://rwth.zoom.us/j/92882583974?pwd=b0RLUS9ldnZkY1prVFBhMFUwaGJ4QT09>

Meeting ID: 928 8258 3974, Passcode: 385275

In this presentation some examples will be given of how knowledge about auditory perception can be used to create advances in audio technology. After briefly talking about these perceptual principles, an efficient room-simulation method (RAZR; Wendt, van de Par, Ewert, JAES, 2014) will be discussed that requires only the most important room parameters to be represented in order to create a highly plausible simulation and rendering of a virtual class room environment (Stärz et al., ICA, 2022). In the second part it will be shown how one can use auditory perceptual principles to reproduce recorded or virtual scenes over a set of loudspeakers placed in a non-optimal, echoic reproduction environment. In the latter example, it will be shown that it is possible to compensate for the acoustics of the reproduction environment using a few straightforward perceptual principles.

10:30 – 11:00 Coffee break

11:00 – 12:15 Keynote Christiane Thiel (Zoom link same as above)

Sensory deprivation has been suggested to impact on brain regions well beyond the deprived modality. Given that uncompensated age-related hearing loss goes along with a slowly increasing reduction of auditory input and is known as a risk factor for cognitive decline, we investigated the effects of such deprivation on brain structure and function. Using several neuroimaging approaches, including structural and functional magnetic resonance imaging, resting state functional connectivity and diffusion tensor imaging I will show that differences in brain structure and function between hearing impaired and normal hearing healthy elderly subjects are not as big as anticipated.

12:15 – 13:10 Lunch

13:10 – 14:10 Visit Laboratories & Demos

14:10 – 14:30 General announcements (Janina) + planning Breakout sessions (Steven)

14:30 – 15:30 Break out session I

1. Audio rendering techniques (Stephan Ewert)
2. EEG (Stephan Getzmann)
3. Face animation and lip sync (Volker Hohmann)

15:30 – 16:00 Coffee break

16:00 – 17:00 Break out session II

1. Evaluation methods & Questionnaires (Steven van de Par)
2. Unity & Unreal / Alternative topic (n.n)
3. Interdisciplinary Glossary (Jamilla Balint)

17:00 – 17:45 Wrap up of breakout sessions

19:00 Dinner in Restaurant Bestial (Theaterwall 20, 26122 Oldenburg)

Thursday 29th, Nussy Building (Küpkersweg 74, 26129 Oldenburg):

9:00 – 9:10 Welcome

9:10 – 11:00 Poster session + coffee break

11:00 – 12:15 Data management plan for DFG (Jamilla)

12:15 – 12:30 Upcoming meetings (Janina)

12:30 – 13:30 Lunch