

Lucas Kiebel, B.A.

Beyond the pinna effect – contrast enhancement in the smallest of space

In the course of the presentation, the audience will become acquainted with the intricacies of sound recording in completely-in-canal (CIC) hearing aids. A key component of the presentation relates to the combination of natural and technological sound recording. Thanks to new directional algorithms, the latter enables individuals with hearing impairment to participate in conversations more effectively. In my presentation, I shall delve into the detailed explanation of the significance of this participation, highlighting the hurdles faced by the hearing impaired in critical situations. Furthermore, I will provide a technical explanation of how these obstacles can be overcome in practice using CIC hearing aids.

In this context, I will emphasise the central importance of near-field magnetic induction (NFMI) technology which enables microphones to connect to form a network, allowing for precise sound localisation or effective reverberation reduction as a result. The framework is literally set by the casing: despite its minimal dimensions, a sophisticated interplay of technology is brought to bear inside.