Dipl.-Ing. Sven Winkler, M.Sc.

## trueLOUDNESS: High potential for improvement in hearing aid fitting

The trueLOUDNESS fitting method takes the hearing threshold and broadband loudness functions into account to calculate gains for the initial adjustment of hearing aids.

Since October 2022, the trueLOUDNESS method has been available on ACAM5 audiometers. We were one of the twenty hearing aid acousticians to be able to try out the fitting method before it was launched on the market. All participants were accompanied by Acousticon and Hörzentrum Oldenburg to track down and fix initial errors.

In this talk, I will explain how we integrated trueLOUDNESS into our fitting process and what the biggest obstacles were. After the changeover, there were considerable individual differences in the gain calculation compared to common first-fit methods. I will present individual cases that show large deviations compared to audiogrambased initial adjustment. I will explain in detail the effects of the measurements on our case discussions in the team, the choice of hearing aids and acoustical coupling for certain cases as well as the reduction of fine-tuning appointments.