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Effect of Head-Movement on Sound-Field ASSR Measurements

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Poster Abstract

Sound-field auditory steady state response (sound-field ASSR) measurement is an objective alternative used for hearing aid fitting validation in infants. For including the hearing aid in the signal path, the stimulus is presented via a loudspeaker, and this approach comes with several challenges. These challenges include head-movement of the test subject, which cannot be guaranteed to remain still, especially with infants. Another aspect affecting the measurement can be the recording room itself. The primary focus of the study was to understand the effect of head-movement on sound-field ASSR measurements. It also looked in to the effect of the room in these measurements. The study was conducted on 11 normal hearing test subjects for three different head-movement conditions and two different room conditions using a speech modified NB-CE Chirp stimulus.

The poster intends to present the result obtained from the statistical analysis on the measured responses and thereby understanding the effect of head-movement and room on sound field ASSR measurements.