

## ITG Conference on Speech Communication 20.- 22.09.2023

**Place:**

Aachen, Germany

**Title:**

Advances In End-to-End Conversational Speech Quality Prediction

**Authors:**

Stefan Bleiholder; Christian Kettler, Nils Rohrer, Steffen Weyer

**Abstract:**

A model for the prediction of the overall end-to-end conversational speech quality in a telecommunication connection was developed recently and validated by conversational tests (CT) in a VoIP scenario using handsets. This contribution now presents an expert subjects CT for the adaptation of the model using hands-free speakerphones (HFT) in vehicles. A configurable HFT evaluation board was used to replicate typical impairments. The expert test subjects rated the conversational speech quality on both sides of the connection. The auditory results provide information about the inter-relations between different quality dimensions relevant for perceived speech quality and give advice to adapt the model for this use case. Laboratory tests with the HFT implementations gathered the necessary acoustic parameters in different conditions (e.g., with and without additional driving noise) for the model prediction. The results are promising and justify a more extensive CT with naïve test subjects.

Find more event abstracts in our >> abstracts archive <<