**Title:** Do I sound odd to you? – Perceived naturalness in voices

**Speaker:** Dr. Christine Nussbaum

When we hear a voice, we form an instant impression about it. Perceived naturalness of voices is a prominent property within these impressions – and one which affects social interactions, both in a purely human context and in scenarios with human and artificial agents. For example, evidence from speech-language pathologies shows that impairments in speech naturalness affect everyday interaction, potentially resulting in social isolation, reduced quality of life, and even depression. Likewise, although recent years have seen rapid developments in the effort to create synthetic voices that resemble human vocal expression, they are consistently rated as less natural than human ones, compromising their acceptability for a range of applications. Given this widespread practical importance, voice naturalness is a concept that deserves thorough empirical investigation. However, in the scientific literature, it currently lacks consistent definition and terminology, which in turn impedes informative and interdisciplinary research efforts. To address this problem, we developed the first concise framework for the conceptualization of voice naturalness. With a taxonomy comprised of two distinct types, namely deviation-based naturalness and human-likeness-based naturalness, we provide a flexible and intuitive reference frame that is applicable across diverse empirical designs, while at the same time promoting comparability across research domains. This way, we hope to pave the way for empirical progress that will lead to a more systematic understanding of voice naturalness, and its impact on everyday communication and interaction.