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Institute of Psychology

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Austria

Innsbruck, 17.07.2025

To whom it may concern,

I am happy to provide a reference letter for Dr. Christine Nussbaum and her application for a PRIME Fellowship on the topic “variability and flexibility in the perception of synthetic voices”.

I know Christine Nussbaum since 2019 when I began co-supervising her PhD-project “Vocal emotions on the brain: The role of acoustic parameters and musicality”, which she completed with summa cum laude in 2023. We continued our collaboration beyond her PhD, with four published papers and another one currently under review.

Dr. Nussbaum is an excellent researcher. Her dissertation, which she pursued against the challenges of the Covid-19 pandemic, entailed an impressive collection of five studies, spanning a range of methodologies including voice morphing, EEG (ERPs, time-frequency analysis), and special populations. She has demonstrated an impressive skill set for conducting psychological and neuroscientific research and is deeply committed to the principles of open science in that she naturally implements transparency and reproducibility in the research process. Over the course of several years, I had many scientific discussions with her, which revealed her deep intrinsic motivation to understand each aspect of her work and her courage to reflect bluntly on associated challenges and pitfalls. Thus, Dr. Nussbaum’s rigorous confrontation with the potential limitations of her PhD experiments – unnatural sounding voices due to acoustic manipulation – inspired her habilitation topic: voice naturalness.

Dr. Nussbaum’s PhD thesis was evaluated with ‘summa cum laude’ by all three thesis reviewers. It has also been awarded the local Ammelie Mummendey Prize by the Institute of Psychology of the University of Jena as well as the 3rd Dissertation prize awarded by the German Society for Psychology in the area of general psychology.

In her short time as an academic, Dr. Nussbaum already managed to outshine her peers with 11 peer reviewed publications of which 7 have her as the first author. She has also been invited to international symposia and presented her work at several conferences. Dr. Nussbaum already successfully applied for third-party funding and will soon co-supervise her first PhD student on the topic “Neurocognitive processing of voice naturalness in human and synthetic voices”. Most notably, she recently published a conceptual paper entitled “Understanding voice naturalness” in *Trends in Cognitive Sciences* (TiCS), a highly-ranked journal in our field (5-year IPF: 21.8). This work attests to one of Dr. Nussbaum’s greatest strengths: she is a sound and critical thinker, and capable of analyzing a research field, identifying important gaps, and pursuing meaningful research projects in order to push the field forward. Finally, Dr. Nussbaum has taught regularly for about 10 years at the undergraduate level and supervised 13 Bachelor and 3 Master theses.

Dr. Nussbaum proposed an ambitious set of studies for her PRIME Fellowship application. These studies are clearly motivated and developed within the theoretical framework of her TiCS paper and which is of great scientific relevance. Dr. Nussbaum has successfully completed very challenging research projects for her PhD, which is why I have no doubts that she is fully qualified to complete the proposed research plan, which will reveal valuable new knowledge about the individual dynamics of synthetic voice perception and which will ultimately lead to well-written, impactful publications.

In sum, Dr. Nussbaum is an outstanding young scholar who is already a game-changer in the field of affective and cognitive neuroscience. This field is in need of scholars like her, who push theory forward and back it up with robust empirical insights. Dr. Nussbaum has repeatedly demonstrated research excellence and is thus greatly deserving of the PRIME Fellowship.

Sincerely,



Prof. Annett Schirmer