

SPEECH AND VOICE IDENTITY RECOGNITION IN THE HUMAN BRAIN

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Abstract

Understanding what is said and recognising the identity of the talker are two important tasks that the brain is faced with in human communication. For a long time neuroscientific models for speech and voice processing have focused mostly on auditory language and voice-sensitive cerebral cortex regions to explain speech and voice recognition. However, our research has shown that the brain uses even more complex processing strategies for recognising auditory communication signals, such as the recruitment of dedicated visual face areas for auditory processing. In my talk I will give an overview of this work and integrate the findings into a novel view of how the human brain recognises auditory communication signals.

Short biography

Katharina von Kriegstein is Professor of Cognitive and Clinical Neuroscience at the Psychology Faculty of the Technische Universität Dresden (TUD). Before joining the TUD, Katharina was Professor at Humboldt University of Berlin and group leader at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig (2009-2017). From 2004-2009 she was postdoc at the Wellcome Trust Centre for Neuroimaging, UCL, London, UK. In her research she focusses on understanding the neural mechanisms that enable humans to communicate successfully with each other. This includes neuroscientific research on typically developed populations as well as people with communication deficits such as developmental dyslexia or person identity recognition deficits. Katharina is an internationally leading expert on neuroscience of human communication. Her work has been published in many high-ranking international journals and she received prestigious grants such as an ERC-consolidator grant (2016-2020) and a Max Planck Research Group Grant (2009-2017).