



PADOVA
neuroscience
CENTER

9 OCTOBER 2025, 3:00 PM
SALA SEMINARI VIMM

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A talk by Sophie Scott
(University College London, UK)

THE NEUROBIOLOGY OF AUDITORY PROCESSING. FROM SOUND TO SOCIAL MEANING



In this talk I will outline a model of auditory processing which integrates neurophysiological and neuroanatomical data from nonhuman primate research, with functional imaging and behavioural data from human studies.

I will argue that human auditory processing comprises at least two distinct kinds of perceptual processing streams, one associated with recognition processes, and one linking sounds to actions.

I will link these into wider linguistic and semantic networks, and consider how these networks are shaped by expertise and social factors.



Sophie Scott is a neuroscientist and a Wellcome Trust Senior Fellow at University College London (UCL). She also serves as Head of the Speech Communication Group at the Institute of Cognitive Neuroscience.

Her research originates in the neurobiology of speech and sound processing, an area in which she has made fundamental contributions to our understanding of how models of auditory processing from non-human primate neurophysiology and neuroanatomy can be used to guide our understanding of the human speech processing. She also established the first systematic approach to the neurobiology of non-verbal emotional expressions. More recently, she has emphasised the importance of studying the human voice in a social context.

Scott was elected a Fellow of the Academy of Medical Sciences in 2012, and a Fellow of the British Academy in 2016. In 2020 she was appointed Commander of the Order of the British Empire in the Queen's Birthday Honours, for her services to Neuroscience.