

Talk Session 1: Haptic/Tactile/Somatosensory

Cross-modal tuning in early visual and somatosensory cortices

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Population-level coding of multisensory frequency signals in human neocortex

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Visual influence on tactile detection and localization in the case of somatosensory damage

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The multisensory basis of speech uncovered by a novel speech-to-touch technology

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Tactile search and visuo-haptic matching abilities in early brain-based visual impairment

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Investigating online movement guidance to visual and non-visual targets

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Talk Session 2: Modeling

Violations of Bayesian and Poisson behaviors in six classes of multisensory and multimodal neurons

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Decentralized neural circuits implement Bayesian sampling of multisensory integration

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Modeling stationarity perception

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A new stochastic model for the sound-induced flash illusion

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Vision and proprioception's influence on sensorimotor confidence during adaptation

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Talk Session 3: Audio-visual

Visual responses across the macaque auditory cortical hierarchy

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Modality switching (and the absence thereof) modulates the redundant signal effect

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Congruent visual information enhances phoneme selectivity in auditory cortex

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Biological motion cue affects multisensory integration

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Electrical stimulation of the superior temporal gyrus evokes rapid responses in visual cortex

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Talk Session 4: Learning

Multisensory training enhances comprehension and cortical processing of auditory speech in noise

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Learning to use new signals for efficient multisensory perception: a psychophysical, neuroimaging and phenomenological approach

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Do sensations get encoded in memory before or after crossmodal integration?

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Investigating cross-modal effects: Examining the relationship between auditory spatial training and visuospatial skills

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Uncovering individual differences in multisensory perception with newly learned cues

Meike Scheller¹, Olaf Kristiansen¹, Melissa Ramsay¹, Chris Allen¹, Stacey Aston¹, Heather Slater¹, Annisha Attanayake¹, Emily Bambrough¹, Nick Prins², and Marko Nardini¹

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Talk Session 5: Audio-visual – Special Populations

Preliminary evidence for altered audiovisual spatial bias in autism

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Cross-modally induced visual sensations in a completely blind individual resembles retinotopic mapping in the visual cortex

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Characterizing audio-visual integration abilities in early brain-based visual impairment

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The multisensory nature of misophonia: Positive attributable visual sources reduce the impact of trigger sounds in misophonia

Ghazaleh Mahzouni¹, Moorea Welch¹, Michael Young¹, Veda Reddy¹, and Nicolas Davidenko¹

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Assessing audiovisual speech perception in noisy environments: a functional near-infrared spectroscopy study on postlingually deafened adult cochlear implant users

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Talk Session 6: Visual-vestibular Interactions and Self-motion

Studying precision and temporal dynamics of heading perception with continuous psychophysics

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Stationarity perception and VR sickness: Effects of repetition and rotation axis

Savannah Halow¹, Val Rodriguez¹, Eelke Folmer¹, and Paul Macneilage¹

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Noise exposure and noise-induced hearing loss predicts visual dependence in the rod-and-frame task

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The role of action control in self-motion perception under ambiguous situations

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Does the vestibular system affect time perception differently in different modalities?

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