

Joint Conference on Binaural and Spatial Hearing (BASH)

Thursday November 5th 2020

Session A – Live Talks – Moderator Chris Stecker

10:30-13:00 Boston / 16:30-19:00 Oldenburg / 2:30-5:00 Sydney

- 1 Philip Joris Something on MSO
- 2 Christian Leibold Dendrite function in MSO neurons
- 3 Catherine Carr ITD circuit plasticity
- 4 Oded Barzelay Reconstruction of reverberated speech from ensemble responses in the rabbit inferior colliculus
- 5 Rodrigo Pavão Natural ITD statistics are represented in the neural code underlying human sound localization / Glitches in azimuth estimation behavior explained by peripheral priors overshadowing sensory cues
- 6 Theo Goverts Binaural recordings in natural acoustic environments: Estimates of speech-likeness and interaural parameters. Consequences for clinical testing and binaural science

Session B – Live Talks – Moderator Erick Gallun

14:00-16:05 Boston / 20:00-22:05 Oldenburg / 6:00-8:05 Sydney

- 1 Les Bernstein Binaural detection as a joint function of masker interaural correlation, masker bandwidth, and interaural time delay: Empirical data and quantitative modeling
- 2 Jonas Braasch Binaural modeling from an evolving habitat perspective
- 3 Chris Stecker What good is a "modeling paper?"
- 4 Richard Stern Modeling binaural interaction / Binaural interaction and automatic speech recognition
- 5 Andrew Franci Deep neural network models of sound localization reveal how perception is adapted to real-world environments

Friday November 6th 2020

Session C – Discussions – Moderator Gin Best

7:15-9:45 Boston / 13:15-15:45 Oldenburg / 23:15-1:45 Sydney

- 1 Jason Mikiel-Hunter "What's in the envelope?: Reconstructing responses of low-CF MSO neurons to white noise tokens from their envelope sensitivity
- 2 Andrew Brughera Sensitivity to envelope interaural time difference: Models of diverse LSO Neurons
- 3 Hongmei Hu Interaural time difference coding in normal hearing and bilateral cochlear implant users - A common EI binaural model for acoustic and electric hearing: Part I single neuro
- 4 Jacques Grange Psychophysical experiments ran through a physiologically-inspired advanced simulator uncover how specific sensorineural pathologies

can degrade binaural unmasking and localization through a reduced access to binaural cues. Underlying mechanisms are revealed

-- Break --

- 5 Jörg Encke A systems theory approach to understanding neuronal sensitivity to binaural cues
- 6 Jonas Klug Low-pass filter characteristics derived from pure-tone ITD sensitivity
- 7 Christian Keine Signal integration at spherical bushy cells - The role of neuronal inhibition
- 8 Robert Luke A behavioural measure of interaural coherence and its relation to internal delay lines

Session D – Discussions – Moderator Torben Pastore

10:45-13:00 Boston / 16:45-19:00 Oldenburg / 2:45-5:00 Sydney

- 1 Julian Angermeier Spatial release from masking through ITD and ILD in the presence of large interaural delays
 - 2 Masoud Geravanchizadeh Selective auditory attention detection based on connectivity measures
 - 3 Stephen Town World-centred sound localisation
 - 4 Lubos Hladek Speech perception and behavior during self-rotation in an acoustically complex scene
- Break --
- 5 Niels Pontoppidan Hearing compensation with binaural augmentation
 - 6 Marcos Cantu Binaurally-inspired approach to real-time computation of a ratio mask for low-latency enhancement of speech intelligibility with binaural cues preserved
 - 7 Jan Rannies Listening effort in binaural speech-on-speech masking conditions in NH and HI listeners

Session E – Live Talks – Moderator Owen Brimijoin

14:00-16:05 Boston / 20:00-22:05 Oldenburg / 6:00-8:05 Sydney

- 1 Erick Gallun Binaural impairment: a historical review of the literature from 1875-2020
- 2 Luke Baltzell The effect of hearing loss on sensitivity to ITDs at low and high frequencies
- 3 Bill Yost An auditory Filehne illusion: Failure of head-position compensation
- 4 Yi Zhou Response times in sound localization tasks
- 5 Antje Ihlefeld How half-binaural is monaural hearing?