

CogHear Workshop

Univeristy of Maryland, College Park - June 16-20
Zoom Meeting ID: 978 6939 0760 Passcode: CogHear

	Mon 6/16 Clinical	Tu 6/17 Technology	Wed 6/18 AI/LLM	Thursday 6/19 BCI	Friday 6/20 Forward looking	
9:00 - 9:55	Sandra Gordon-Sallant University of Maryland Overview of links between age-related hearing loss and cognitive decline in older people	Heather Bortfeld UC, Merced Functional near-infrared spectroscopy for neuroimaging in cochlear implant recipients: innovations and applications	Jean-Remi King (virtual) Meta/Ecole Normale Superieure Emergence of Language in the Human Brain	Vikash Gilja (virtual) Paradromics Inc. / UC San Diego Neural Prostheses	Alain de Cheveigne Ecole Normale Superieure Auditory brain decoding: Problems, solutions, and ways forward	
9:55 - 10:00	Transition					
10:00 - 10:55	Jonathan Simon University of Maryland Neural Representations of Same-Species Vocalizations in a Human Primate Model	Samu Taulu University of Washington Recent advances in OPM-MEG	Samuel Norman-Haignere University of Rochester Conducting experiments on models: using deep artificial neural networks to guide experimental neuroscience research	Cheol Jun Cho UC Berkeley Speech neuroprostheses for restoring naturalistic communication and future prospects	Giovanni diLiberto Trinity College Speech neurophysiology in realistic contexts: Big hype or big leap?	
10:55 - 11:15	Coffee Break					
11:15 - 12:10	Stefanie Kuchinsky Walter Reed National Military Medical Center Keeping an Eye on Listening Effort: Toward Enhanced Clinical Hearing Tests	Sridhar Kalluri Starkey Important clinical problems in hearing aids	Shailee Jain UC San Francisco Building out-of-the-box speech decoders with large-scale self-supervision	Nathan Crone Johns Hopkins University Speech decoding with implantable electrocorticographic BCIs	Nima Mesgarani Columbia University From Selective Listening to Brain-Controlled Hearing	
12:10 - 1:30	Lunch Break					
1:30 - 2:25	Lucas Parra City College of New York Auditory narratives drive the whole dynamical system: brain, heart and eyes -- And how to distinguish effort from attention	Abhinav Uppal/Shreshth Saxena UC San Diego/McMaster University In-ear EEG and mobile eye-tracking to study audiovisual interactions in naturalistic settings	Laura Gwilliams Stanford University Neural Algorithms of Human Language	Edmond Lalor University of Rochester Explaining the explainable variance in EEG responses to natural speech.	Adjourn	
2:25 - 2:30	Transition					
2:30 - 3:25	Ken Grant Walter Reed National Military Medical Center Hearing deficits in listeners with normal hearing thresholds and mild hearing impairment: Effects of blast exposure.	Patrick Kanold Johns Hopkins University Understanding the auditory brain with two-photon imaging	Chris Honey Johns Hopkins University Memory and Agency in Biological and Artificial Intelligence	Behdash Babadi University of Maryland Advances in Neural Data Analysis Through the Granger Formalism		
3:25 - 3:45	Coffee Break					
3:45 - 5:00	RoundTable Discussion	Demo: in-ear / Muse sensors	RoundTable Discussion	Annapolis visit and workshop banquet		