

## **Program**

### **Tuesday, November 7**

7:00pm      Hackathon Happy Hour  
                 Location TBA

### **Wednesday, November 8**

8:00am – 5:00pm      MEG Hackathon - FAES Classroom 5

8:00am – 12:00pm      Human Neocortical Neurosolver Course – NMR center conference room

10:00am – 12:00pm      Working Group – New Clinical Indications

12:00pm – 1:00pm      Lunch

1:00pm – 2:45pm      Working Group – Multimodal Imaging – Pete Molfese

2:45pm – 3:00pm      Coffee and snacks

3:00pm – 5:00pm      Industry Panel

5:30pm      Dinner and Social Gathering  
                 Rock Bottom Brewery, Bethesda MD

## Thursday, November 9

- 8:00am – 8:30am Coffee and snacks
- 8:30am – 9:00am Meeting introduction – Allison Nugent
- 9:00am – 10:00am **Keynote Lecture: Tal Kenet**  
**Functional connectivity abnormalities in autism spectrum disorder – Great expectations and Hard Times (and Great Expectations again?)**
- 10:00am – 10:30am Coffee Break and Poster Session
- 10:30am – 11:20pm **Symposium 1: Auditory processing and language**  
*Neural tracking Measures of speech Intelligibility: manipulating intelligibility while keeping acoustics unchanged*  
Dushyanthi Karunathilake  
**Left fusiform activity explains variability in fixation durations during natural reading: Evidence from co-registered MEG & eye-tracking**  
**Graham Flick**  
*Localizing covert and overt picture naming processes using MEG*  
Hsi T. Wei  
*Precision tagging of neural responses for tracking selective attention & learning mechanisms in the brain*  
Cassia Low Manting
- 11:20pm – 11:50pm **Symposium 2: Machine Learning**  
*Temporal signatures of multidimensional object properties in the human brain*  
Lina Teichmann  
*Decoding Individual sequence skill learning actions during planning and execution*  
Debadatta Dash  
**Temporal dynamics of age, gender, and identity representations invariant to head views for familiar faces**  
**Amita Giri**
- 11:50pm – 12:30pm **Symposium 3: OPM MEG**  
*Multi-Frequency encoded source imaging for wearable OPM-MEG*  
Jing Xiang  
*Biplanar coil cancellation system for OPM-MEG using PCB*  
Mainak Jas  
*Towards precise mapping of digit representations in the human somatosensory cortex with high resolution magnetoencephalography*  
Amaia Benitez-Andonegui

12:30pm – 1:30pm	Lunch
1:30pm – 2:30pm	<b>Keynote Lecture: Elizabeth Davenport</b> <b>The Impact of Head Impacts: MEG Findings in Concussion and Sub-Concussive Impacts</b>
2:30pm – 3:30pm	Coffee Break and Poster Session
3:30pm – 4:30pm	<b>Symposium 4: Big Data and Methods/Stats</b> <i>Age-Related trends in transient beta bursts: observations from big data</i> <i>Lindsey Power</i> <b>Fully hyperbolic neural Networks: A novel approach to discover aging trajectories from MEG brain networks</b> <b>Hugo Ramirez</b> <i>The ENIGMA MEG resting state analysis pipeline</i> <i>Jeff Stout</i> <i>Estimating the number of active sources in MEG based on an F-ratio method</i> <i>Amita Giri</i> <i>Reliable MEG/MSI source localization in patients with implanted vagus nerve stimulator (VNS) devices: a single-centered, large clinical observation study</i> <i>Mahmoud Jiha</i>
4:30pm – 5:00pm	Meeting Close