

4th Lead-DBS Workshop

Berlin, September 13-15 2019 - Charité University Medicine Berlin

Location: Kaiserin-Friedrich-Haus, Seminarraum, CCM Berlin

Robert-Koch-Platz 7, 10115 Berlin

13 September 2019		
3:00 PM	Arrival / Welcome / Coffee	
Potential Installation Questions, Setup of Datasets		
4:00 PM	Andreas Horn	Electrode Localizations with Lead-DBS: Introduction and Examples
5:00 PM	Friederike Irmen	Lead-DBS as a research tool in cognitive neuroscience
6:00 PM	Leon Sobesky	Function & Anatomy of the Subthalamic Region, Cortex-basal-ganglia Loops and Specialized MRI Sequences for Imaging the Basal Ganglia
7:00 PM	Welcome Reception	
14 September 2019		
9:00 AM	Arrival	
9:15 AM	Jan Rödiger, Friederike Irmen	Linear Deformations and Basics in Volumetric Imaging Hands-On Session: Co-registrations in Lead-DBS
10:30 AM	Coffee break	
10:45 AM	Leon Sobesky, Friederike Irmen	Nonlinear Deformations, Atlases, Spaces and Advanced Concepts Hands-On Session: Spatial Normalization, The MAgE-T-Brain Approach and Working with Lead-DBS on a High-Performance Compute Cluster
12:00 PM	Friederike Irmen	Troubleshooting: What to do if Co-registrations or Normalizations Fail Hands-On Session: CT / MR Fusions Using 3D Slicer
1:00 PM	Lunch break	
2:00 PM	Friederike Irmen	Electrode Reconstructions, VTA Modeling Hands-On Session: FEM Based VTA Model in Lead-DBS

3:15 PM	Andreas Horn	Lead Group: Group Analyses with Lead-DBS Hands-On Session: Group Analyses
4:30 PM	Coffee break	
5:00 PM	Bassam Al-Fatly	Using Normative Connectomes to Analyze Data in Lead Connectome Mapper
6:00 PM	Clearing of Open Questions, Re-cap / Individual Help on Localizing DBS Electrodes. <i><u>In this Session, Processes that were Explained too Fast for Individual Participants May Be Reiterated.</u></i>	
6:30 PM	Wrap up, Social event	
15 September 2019		
9:00 AM	Arrival	
9:15 PM	Til Dembek	Orientation of Directional DBS Leads - Possibilities and Pitfalls of the DiODE Algorithm
10:15 AM	Coffee break	
10:45 AM	Andreas Horn	Connectomic Deep Brain Stimulation
11:30 AM	Andreas Horn	Processing Patient Specific Structural Connectivity in Lead Connectome (DTI, Global Tractography, Generalized Q-sampling Imaging) Hands-On Session: Structural Connectomics in DBS
1:00 PM	Lunch break	
2:00 PM	Ningfei Li	Lead Connectome – Functional and Structural Connectomics Hands-On Session: Functional Connectomics in DBS or non-DBS data
3:00 PM	Friederike Irmen	Analyzing Task-DBS Data Using Normative Connectomics
4:00 AM	Coffee break	
4:30 PM	Jan Rödiger	tba (Subcortical Electrophysiology Mapping)
5:30 PM	Bassam Al-Fatly	The optimal connectivity profile of thalamic deep brain stimulation to effectively treat essential tremor
6:30 PM	Clearing of Open Questions, Re-cap / Individual Help on Localizing DBS Electrodes. <i><u>In this Session, Processes that were Explained too Fast for Individual Participants May be Reiterated.</u></i>	
7:00 PM	Wrap up	