

FULL PROGRAM

THURSDAY 19/06

09:30-10:00 Check-in / Presentation & poster setup

10:00-10:45 **Introduction by T. Deffieux**

10:45-11:30 **Lecture by A. Gozzi** From BOLD to fUSI: mapping large scale networks in rodents beyond fMRI

Brain connectivity & drug discovery I

11:30-11:50 **C. Pepe** Large-scale fUS connectivity networks in the mouse brain

11:50-12:10 **I.E. Mosneag** fUS imaging in Alzheimer's disease

12:10-12:30 **Z. Fu** Meta-analysis of SCHEMA functional connectome using fUS imaging

12:30-14:00 Lunch break

Brain mapping & decoding

14:00-14:20 **I. Alcala** Retinotopic characterization of primate visual cortex using fUS imaging for sonogenetic stimulation

14:20-14:40 **D. Liao** Exploring neural dynamics in the auditory telencephalon of crows using fUS

14:40-15:00 **B. Berthon** Local activities in the medial frontal cortex predict self-initiated action

15:00-15:20 **F. Cybis-Pereira** Speed vascular patterns in the spatial navigation system

15:20-15:40 **R. Wykes** Concurrent fUS imaging with graphene-based DC-coupled electrophysiology as a platform to study slow brain signals and cerebral blood flow under control and pathophysiological brain states

15:40-16:10 Coffee/tea break

Neurovascular coupling

16:10-16:30 **A. Landemard** Neurovascular coupling throughout the brain: an insight from whisking events?

16:30-16:50 **N. Zucker** 3D functional ultrasound localization microscopy reveals global regulation of cerebrovascular function during local neurovascular coupling

16:50-17:10 **J. Thalgott** Non-invasive detection and functional characterization of pericyte dysfunction in HHT using super-resolution ultrasound-identification of TGF-β as a potential drug target

17:10-17:30 **K. Chhabria** Catecholaminergic cells in RVLM control cortical hemodynamics through polysynaptic circuits

17:30-18:30 **Poster session**

19:30-01:00 **Cruise & dinner on the Seine river**

FRIDAY 20/06

09:30-10:00 Check-in / Presentation setup

10:00-10:45 **Lecture by S. Soloukey** Ultrafast ultrasound imaging of the human brain: clinical opportunities in- and outside of the neurosurgical operating room

Clinical applications

10:45-11:05 **F. Faure** fUSiON: neuroimaging combining fUS and NIRS for whole brain connectivity imaging in the neonate

11:05-11:25 **E. Gommers** Towards multimodal intraoperative functional mapping using simultaneous fUSi and ECoG recordings during tumor resection in humans

11:25-11:45 **K. Agyeman** Interictal Activity Mapping and Effects of Epileptogenic Seizure Tissue Resection and Responsive Neurostimulation in the Human Brain aging

11:45-12:30 **Presentation by J. Ferrier** Breaking barriers in fUS neuroimaging: what's new with IconeusOne?

12:30-14:00 Lunch break

14:00-14:45 **Lecture by S. Picaud** Ultrasound neuromodulation for visual restoration

Behavioral studies

14:45-15:05 **A. Bergel** Hippocampus-cortex communication and global brain hemodynamics during hippocampal ripples observed with fUS imaging

15:05-15:25 **C. Zhang** Brain-wide fUS imaging in head-fixed marmosets

15:25-15:45 **F. Cheataini** Studying the influence of cerebrovascular dynamics on CSF-ISF exchanges in rats

15:45-16:10 Coffee/tea break

Brain connectivity & drug discovery II

16:10-16:30 **Z. Zhou** Neural Dynamics in Shank3 Mutant Mice: Insights from fUS Imaging

16:30-16:50 **M. Abioui-Mourgues** Improving stroke prognosis through early ultrasound imaging in awake mice

16:50-17:10 **J.C. Mariani** Intrinsic fluctuations in arousal shape the dynamic organization of functional ultrasound large-scale networks

17:10-17:30 **Z. Lenkei** Long-term effects of gestational ketogenic diet on neural circuit development in mice

17:30-17:45 **Wrap up**