Repository for Human and Animal Imaging and Physiological Multimodal Data

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MAFIL: Multimodal And Functional Imaging Laboratory

Core-facility with open access, part of CEITEC MU and research infrastructures Czech-BioImaging and Euro-BioImaging









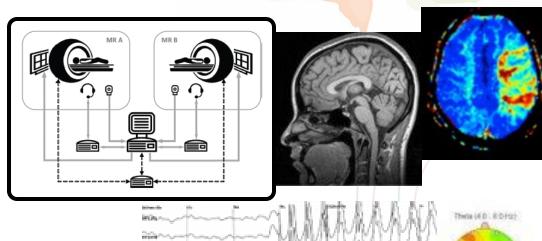
- Connection to several faculties of MU
- Connection to University Hospital Brno

Country-unique combination of equipment:

- Two 3T MR scanners accompanied by MR compatible EEG systems and various accesories for functional MRI
- Electrophysiological labs including non-invasive brain stimulation

Specific expertise:

- fMRI hyperscanning
- real-time fMRI neurofeedback
- simultaneous EEG/ExG fMRI







Multimodal Imaging Data Repository

- building on National Repository Platform for Research Data
- aim : create a domain specific repository and related services
- appropriate handling of sensitive data and FAIRification by design

Multi-disciplinary expertise

- MAFIL
- CERIT Scientific Cloud
- EBRAINS

Multi-modal

- MRI
- EEG
- PET
- NIBS
- ...

Multi-species

- human
- mouse
- ...

Multi-domain

- brain
- spinal cord
- joints
- ...





Handling of Sensitive Data

- Access control at dataset level
- Multiple access modes :
 - open, automated approval, manual review
- All identifiable human data handled under informed consent
- Aiming to provide DTA and other templates for the users

Integration with Trusted Research Environments

- Secure interactive and batch data processing attached to the repository
- Supporting both researchers and data curators
- Enables data preparation, analysis, and controlled publication workflows

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