

Department of Biomedical Engineering



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Funding:

FNSNF Swiss National Science Foundation





Center for Adaptable MRI Technology

The Center for Adaptable MRI Technology (AMT Center) aims to develop disruptive MRI technology to push the boundary of quantitative diagnosis and monitoring in environments and settings usually out of reach.

This task is confronted with at least two major challenges:

- <u>Scaling down and opening the MRI device</u>: one way to achieve this goal is to leverage magnetic field strength orders of magnitude lower than today's MRI devices known to be particularly heavy and expensive, along with extreme siting requirements, costs, as well as a limited access for patients.

- <u>Enhancing the flexibility of MRI</u>: the AMT Center aims to develop methods and instruments that perform in heterogeneous environments and compensate for the impeded signal sensitivity naturally available at lower magnetic fields.

The Adaptable MRI Technology Center's research focuses on four different areas:

- Tools and Methods for Low-field MRI
- Image Guided Therapies
- Quantitative and Functional MRI
- Fast Multi-parametric MRI

The AMT Center was founded in May 2017 by Najat Salameh and Mathieu Sarracanie and hosts today 7 active members. It is currently mainly funded by the Swiss National Science Foundation.

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