



University
of Basel

Department of
Biomedical Engineering



Seminar Series:

Latest Breakthroughs in Biomedical Engineering Research

Location: DBE Science Lounge, Hegenheimermattweg 167C, 4123 Allschwil

Date & Time: Thursday 28.11.2024 | 15:30 – 16:30

Host: Prof. Oliver Bieri

Mapping the brain using quantitative MRI

Gian Franco Piredda

Swiss Innovation Hub, Siemens Healthineers

Abstract

Recent advances in magnetic resonance imaging allow for the rapid characterization of microstructural parameters of brain tissue. Using normative atlases, this can provide insight into subtle changes in the brain, allowing a better understanding of disease and potentially helping to better diagnose patients. This talk will introduce the necessary methods and try to make the case for the clinical usefulness of this concept.

Biosketch

Gian Franco Piredda pursued his studies in Biomedical Engineering at the Polytechnic University of Turin, Italy, and earned his Ph.D. in quantitative MRI from the Swiss Federal Institute of Technology in Lausanne. Starting from 2021, he has been working as an on-site MR Research Scientist for Siemens Healthineers at Campus Biotech, Geneva, advancing clinical endeavors on an ultra-high field system (7T MRI) and fostering multi-functional collaborations between Siemens Healthineers and the local research and clinical community. Since October 2024, Gian Franco leads the Acquisition and Reconstruction team of the Swiss Innovation Hub of Siemens Healthineers, aiming at developing cutting-edge MR techniques and ensuring their translation into clinical applications.