Psychiatry and Neuroscience Seminar Series 2024

Pr Cyril POUPON
(Host OPPENHEIM C)
CEA, NeuroSpin, Saclay, France

New AI to map in vivo brain tissue microarchitecture using diffusion MRI

Friday, December 6th, 2024, noon
Room D Levy, 102-108 rue de la santé - 75014 Paris

Pr Cyril POUPON

Unit Building large instruments for neuroimaging: from population imaging to ultra-high magnetic fields (BAOBAB), Magnetic Resonance Imaging and Spectroscopy Laboratory, NeuroSpin, Saclay, France

With Jean-François Mangin they lead the unit BAOBAB, to build large instruments for neuroimaging: from population imaging to ultra-high magnetic fields at NeuroSpin department of CEA. He is engineer from Institut National des Sciences Appliquées de Lyon in 1995, the M.Sc. degree in signal and image processing (INSA-Lyon, CREATIS lab) in 1995, the PhD degree in signal and image processing from Ecole Nationale des Télécommunication de Paris in 1999, and the Habilitation à Diriger des Recherches from Paris 5 university in 2006. He has been a PhD student at CEA Service Hospitalier Frédéric Joliot (Orsay) in bio-informatics and diffusion-weighted MR imaging. After a period of 3 years as a research engineer for the GE healthcare company, he joined the MR physics group of SHFJ to build a bridge between the bio-informatics lab and the MR physics laboratories. He previously worked in the neuro-informatic lab of NeuroSpin (LNAO), and he's actually the head of the Nuclear Magnetic Resonance Imaging and Spectroscopy unit of NeuroSpin (UNIRS). His research is focused on high resolution diffusion imaging, on the use of diffusion imaging to infer the cytoarchitectony of brain tissues, coordinating the research about diffusion imaging at NeuroSpin from pulse sequences to post-processing tools dedicated to clinical and cognitive applications.

Keywords:

Computational Biology, Deep learning, Magnetic Resonance ultra-high field, Neuroimaging

Stay tuned