

Monday, May 22, 2023, 15:00 hrs Hybrid Meeting (Lecture Hall and via Zoom)

Institute Colloquium

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Singularity of the white matter structural connectivity of the human brain compared to the chimpanzee brain

One of the great challenges of neuro-evolutive studies is to build and compare models of the brain connectome between species. The human species is the fruit of a long and complex evolution and its closest phylogenetic living relative among hominids is the chimpanzee. The existence of non-invasive brain microstructure exploration methods, such as magnetic resonance imaging (MRI), has made it possible to explore the differences and commonalities of the chimpanzee and human brain connectivity. Using brain structural and diffusion MRI, two atlases of the superficial and deep white matter connectivity in chimpanzees and humans were created allowing subsequent investigations of their morphology. It allowed to question the singularity of the human brain connectivity with respect to the chimpanzee brain from an hodologic point of view.