



The Singapore Bioimaging Consortium (SBIC)
presents a seminar
on

**“From Static to Dynamic Representations of Functional
connectivity MRI”**

Speaker: Dr Raphaël Liégeois
Biomedical Engineer
Singapore Institute for Neurotechnology (SINAPSE)
NUS

Host : Dr Joanes Grandjean

Date : Thursday, 14 September 2017

Time : 4.00pm - 5.00pm

Venue : SBIC Seminar Room
11 Biopolis Way
Level 2, Helios Building, Singapore 138667
(Please enter via Level 1)

Abstract

Recent years have seen a flourishing literature exploring the time-varying nature of functional connectivity (FC) evaluated from fMRI time series. The main consensus emerging from these studies is that a static representation of FC, e.g. based on the correlation between fMRI time series, misses important information encoded in fMRI data. In this talk, Dr Raphaël Liégeois will present a model that allows to efficiently encode the time-varying -or dynamic- properties of FC. Based on this model, he will then define a marker of FC that encodes both static and dynamic fMRI connectivity properties. The potential benefits of this new FC marker as compared to classical static measures of FC is then illustrated on the Human Connectome Project dataset.

About the Speaker

Dr Raphaël Liégeois is a biomedical engineer working on the dynamical properties of functional connectivity, evaluated from fMRI time series. During his PhD in Liège (Belgium), he applied these dynamical markers to classify patients in different states of consciousness. Dr Liégeois joined Thomas Yeo's team at CIRC (NUS) in November 2015, and he is now developing new dynamical models of functional connectivity, aiming at a finer description of different neuro-degenerative diseases.

Admission is free and all are welcome ---