



The Alfredo Federico Strauss Center
for Computational Neuro-imaging
Tel Aviv University

Brain Mapping and Neuroimaging Seminar Series 2018

03/06/2018 | 10:00 | Sackler 119

**What makes a brain unique?
Comparing brains using connectivity blueprints**



**Prof. Rogier B. Mars
University of Oxford,
UK**

The great promise of comparative neuroscience is to understand why brains differ by investigating the relations between variations in the organization of different brains, their evolutionary history, and their current ecological niche. For this approach to be successful, the organization of different brains needs to be quantifiable.

I will propose a general framework for understanding similarities and differences between the brains of primate species. The approach uses white matter blueprints of the whole cortex based on a set of white matter tracts that can be anatomically matched across species. The blueprints provide a common reference space that allows us to navigate between brains of different species, identify homologue cortical areas, or to transform whole cortical maps from one species to the other.

Specializations are cast within this framework as deviations between the species' blueprints. We illustrate how this approach can be used to compare human and macaque brains

- Refreshments will be served from 09:45
- Next seminar: To be announced



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