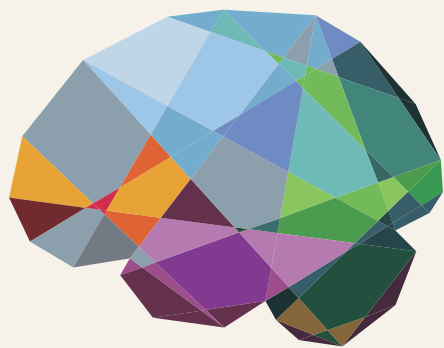


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2017

NODE #4 TORONTO

PRACTICAL BRAIN NETWORK MODELING



THEVIRTUALBRAIN.

Get up to speed about the fundamental principles of full brain network modeling using the open-source neuroinformatics platform The Virtual Brain (TVB).

TVB enables biologically realistic modeling of network dynamics using Connectome-based approaches across different brain scales.

Generate macroscopic neuroimaging signals incl. fMRI, intracranial and stereotactic EEG, surface EEG and MEG for single subjects.

MORE INFORMATION & REGISTRATION: WWW.THEVIRTUALBRAIN.ORG/NODE4

A workshop hosted by the TVB team at:
Baycrest Health Sciences
Kimel Family Building :: Jacob Family Theatre
3560 Bathurst Street, Toronto, ON, Canada M6A 2E1

Morning sessions from 9:00 to 12:00

Introduction to workshop & caffeine intake

A generative model of the brain: Describing the building blocks of a brain network model

Basic principles and assumptions, recent studies with different local models, approximation of neural fields

Interacting with TVB

Working with the web UI, command line and scripting interfaces

ENJOY A FULL-DAY WORKSHOP MEET LEADING EXPERTS IN NEUROSCIENCE

Afternoon sessions from 13:00 to 17:40

Hands-on: How to obtain a TVB friendly dataset

Understanding data formats and setting up pipelines for data extraction

Hands-on: Modeling brain networks at rest

Modeling a resting state brain and exploring its dynamics

Hands-on: Modeling the impact of structural lesions

Working with the Connectome as a “parameter”, conduction speed and time delays

Hands-on: Modeling epilepsy using TVB

Modeling partial seizure propagation for specific patients