The 1ˢᵗ Workshop on

Brain Analysis using COnnectivity Networks

BACON - In Conjunction with MICCAI 2016

October 17th, 2016, Athens, Greece

Scope

Understanding brain connectivity in a network-theoretic context has shown much promise in recent years. This type of analysis identifies organisational principles of the brain, bringing a new perspective to neuroscience. Combined with large public connectomics databases recently made available, this development has the potential to transform our understanding of the brain. However, connectome analysis is still an emerging field and there is a crucial need for robust computational methods to fully unravel its potential. The Workshop on Brain Analysis using Connectivity Networks (BACON), organised in conjunction with MICCAI 2016, seeks to address these challenges. BACON provides a platform to discuss the development of new analytic techniques, methods to evaluate commonly used approaches, pre-processing effects, and any other topics relevant to quantifying brain connectivity.

We invite submissions from a variety of fields, in order to bring together researchers in medical imaging and neuroscience to discuss the challenges and development of new techniques in brain connectivity analysis, as well as their benefits for clinical applications.

Topics include...

- Data processing for network construction
- Multimodal processing, particularly fMRI and DTI fusion
- Network-based classification and bio-marker identification
- Longitudinal analysis
- Evaluation/model validation
- Visualisation
- Applications of clinical significance: topics can vary widely, including neurodevelopment and ageing, disease effects, genetic variability in brain networks, etc.
- Group-level network analysis, particularly for large data sets

Important Dates

- Registration for Submission: June 14th, 2016
- Full Paper Submission: June 17th, 2016
- Notification of Acceptance: July 25th, 2016
- Camera-ready Version: August 12th, 2016
- Workshop Date: October 17th, 2016 (am)

Invited Speakers

Gael Varoquaux
INRIA-Saclay, France

Neda Jahanshad
University of Southern California, USA

Organisers

Boris Gutman
University of Southern California

Sarah Parisot
Imperial College London

Jonathan Passerat-Palmbach
Imperial College London

Markus D. Schirmer
Harvard Medical School

Submission Guidelines

Authors should prepare manuscripts of no longer than 10 pages, including references. The manuscripts should be anonymous, and formatted following the LNCS style guidelines. All submissions will be reviewed by the programme committee, comprised of experts in the field. Papers selection will be based on the soundness of the proposed method or application, relevance and clarity of presentation.