

Preface

The First International Workshop on Connectomics in NeuroImaging (CNI 2017) was held in Quebec City, Canada, on September 14th, 2017, in conjunction with the 20th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI).

Connectomics is the study of whole brain maps of connectivity, commonly referred to as the brain connectome, which focuses on quantifying, visualizing, and understanding brain network organization, including its applications in neuroimaging. The primary academic objective is to bring together computational researchers (computer scientists, data scientists, and computation neuroscientists) to discuss new advancements in network construction, analysis, and visualization techniques in connectomics and their use in clinical diagnosis and group comparison studies. The secondary academic objective is to attract neuroscientists and clinicians to show recent methodological advancements in connectomics, and how they are successfully applied in various neuroimaging applications. CNI 2017 was held as a single-track workshop, which included: four keynote speakers (Bharat Biswal, Chris Rorden, Boris Bernhardt, and Moo Chung), oral paper presentations, poster sessions, and software demonstrations.

The quality of submissions to our workshop was very high. Authors were asked to submit 8 pages in LNCS format for review. A total of 26 papers were submitted to the workshop in response to the call for papers. Each of the 26 papers underwent a rigorous double-blind peer-review process, with each paper being reviewed by at least two (typically three) reviewers from the Program Committee, which was composed of 31 well-known experts in the field of connectomics. Based on the reviewing scores and critiques, the best 19 papers were accepted for presentation at the workshop, and chosen to be included in this Springer LNCS volume. The large variety of connectomics techniques, applied in neuroimaging applications, were well represented at the CNI 2017 workshop.

We are grateful to the Program Committee for reviewing the submitted papers and giving constructive comments and critiques, to the authors for submitting high-quality papers, to the presenters for excellent presentations, and to all the CNI 2017 attendees who came to Quebec City from all around the world.

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