香港中文大學統計學系
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SEMINAR

DEPARTMENT OF STATISTICS
THE CHINESE UNIVERSITY OF HONG KONG

Statistical Neuroimaging Analysis: An Overview

INVITED SPEAKER

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TIME

April 27, 2023 (Thu) · 10:00 am - 11:00 am

VENUE (hybrid mode)

LT2 · Lady Shaw Building · CUHK | Zoom link

ABSTRACT

Understanding the inner workings of human brains, as well as their connections with neurological disorders, is one of the most intriguing scientific questions. Studies in neuroscience are greatly facilitated by a variety of neuroimaging technologies, including anatomical magnetic resonance imaging (MRI), functional magnetic resonance imaging (fMRI), electroencephalography (EEG), diffusion tensor imaging, positron emission tomography (PET), among many others. The size and complexity of medical imaging data, however, pose numerous challenges, and call for constant development of new statistical methods. In this talk, I give an overview of a range of neuroimaging topics our group has been investigating, including imaging tensor analysis, brain connectivity network analysis, multimodality analysis, and imaging causal analysis. I also illustrate with a number of specific case studies.