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"Statistical Methods for extracting and comparing in multi-modal neuroimaging studies"

Monday, October 3, 2022
Talk at 4:00 - Hilles 109
Tea at 3:30 – Foyer outside of Hilles 109

Abstract:

In recent years, neuroimaging data have played an increasingly important role in studies of mental health, neurodevelopment, and neurological disease. Concurrently, there has been substantial innovation in statistical methods that aim to improve the interpretability and actionability of neuroimaging research. In this talk, I will describe some of the common challenges involved in statistical analysis of neuroimaging data, such as accounting for the complex spatial structure of images, adjusting for confounders, and dimensionality. I will then discuss recent methodological contributions in hypothesis testing and feature extraction, with applications in studies of neurodevelopment and Alzheimer's disease.

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