

Graph analysis of brain networks: a useful tool?

脳画像データに対するグラフ理論の適応と実践

Brain networks derived from brain imaging data are defined as a set of regions and the connectivity between these regions. These networks can be quantified using graph analysis. First, I will review the theoretical concepts of graph analysis and discuss directed and undirected networks as well as binary and weighted networks. Then I will show a number of different applications using data obtained from different modalities such as functional MRI, structural MRI, diffusion MRI but also PET data with different tracers. These applications illustrate what can be learned from graph analysis. While discussing the applications, I will also illustrate the limitations and pitfalls of this technique.



Speaker

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Date

April 23 (Mon.) 17:00 – 19:00

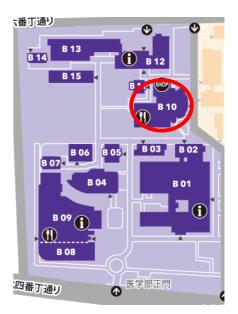
Venue

星陵オーディトリウム

(星陵キャンパス、生協2階)

Seiryo Auditorium, Seiryo Campus

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主催:日本学術振興会学術システム研究センター学術研究動向等に関する調査研究心身医学専門調査班・平成30年度調査研究(主任研究員・福土審)