

國家理論科學研究中心數學組（臺北辦公室）

IAMS / NCTS-TPE Applied Math Seminar

Speaker: Prof. Fa-Hsuan Lin (Institute of Biomedical Engineering, NTU)

Dr. Yi-Cheng Hsu (Institute of Biomedical Engineering, NTU)

Title: Magnetic resonance imaging of the human brain: progress, challenges, and opportunities

Abstract:

Magnetic resonance imaging (MRI) has become a dispensable tool in clinical diagnosis and neuroscience studies because of its non-invasiveness, not using ionizing radiation, high soft-tissue contrast, and high spatial resolution. The development of functional MRI (fMRI) technique further allows using MRI to reveal neural correlates of human brain function. In this talk, I will summarize our recent technical developments in MRI, including ultra-fast fMRI acquisition/analysis. We will also demonstrate how to use fMRI to study human brain responses to complex naturalistic audiovisual stimuli. Challenges and opportunities of further improving MRI's sensitivity and spatiotemporal resolution will be discussed.

Time: Oct. 17 (Fri.) 13:20 – 14:20

Venue: R202, Astro-Math Building (NTU Campus)

Organizer: Jenn-Nan Wang (NTU)

For more information, please refer to <http://www.cts.ntu.edu.tw/>, or contact "cts_tpe@math.cts.ntu.edu.tw"