

The University of Hong Kong  
Department of Psychology

*Departmental Seminar*

***Individual differences in visual psychophysics  
and brain imaging***

Date: January 22, 2014 (Wednesday)  
Time: 11:30 a.m. – 12:30 p.m.  
Venue: Social Sciences Chamber, 11/F, The Jockey Club Tower,  
Centennial Campus, HKU  
Speaker: Professor Fang Fang  
Professor  
Department of Psychology, IDG/McGovern Institute for Brain  
Research, Peking-Tsinghua Center for Life Sciences,  
Peking University

In the area of vision, researchers are usually interested in commonalities across individuals. Individual differences were often neglected and treated as a source of ‘noise’. In this talk, I will present our recent psychophysical and brain imaging (MRI and ERP) researches, which investigate the correlation between psychophysical and MRI/ERP measures across individual subjects. With emphasis on individual differences, these studies reveal the critical role of V1 in generating the Ponzo illusion and a bottom-up visual saliency map, V2 in color and motion misbinding, and the left fusiform cortex in face perceptual learning. Thus, these studies demonstrate that exploiting individual differences is useful and important to understand the neural processes of various visual phenomena, ranging from low-level to high-level vision.