



Department of Psychology
The University of Hong Kong

香港大學心理學系

Departmental Seminar

Cracking the Neurocomputational Mechanisms of Flexible (Social) Behaviour in Health and Disease

4:00p.m. – 5:00p.m. | October 31, 2024 (Thursday)

Rm 813, 8/F, The Jockey Club Tower | Centennial Campus | The University of Hong Kong



Dr Lei Zhang

Associate Professor
Centre for Human Brain Health
School of Psychology
University of Birmingham, UK

Abstract

Flexible (learning) behaviour refers to the adaptive change of behaviour in response to changing environmental contingencies. Although flexible learning behaviour has been studied extensively in the past, very little is known about its neurocomputational mechanism. In this talk, I will first illustrate how to assess flexible learning behaviour through the lens of computational modelling, then I will showcase two studies, one (fMRI study) focusing on flexible learning in a social context, and the other (behavioural study with large sample) focusing on flexible learning in individuals with autism. These studies are expected to motivate new research avenues in social neuroscience and computational psychiatry.

About the Speaker

Dr. Lei Zhang is an associate professor at the Centre for Human Brain Health, School of Psychology, University of Birmingham, UK. He directs the Adaptive Learning Psychology & Neuroscience (ALPN) Lab, where he addresses the fundamental question of the “adaptive brain” by studying the cognitive, computational, and neurobiological basis of social learning and decision-making in healthy individuals (across the lifespan), and in psychiatric disorders. To achieve this, he uses both theory-driven and data-driven computational approaches, together with behavioural measurements and neuroimaging. He studied psychology in China, obtained his PhD in Germany, and received postdoc experience in Germany and Austria. Dr. Zhang received multiple international recognitions including the Credibility Prizes from the British Neuroscience Association (2024), Rising Star Award from the Association for Psychological Science (2022), and the Trainee Professional Development Award from Society for Neuroscience (2020). He is an Editorial Board Member for Communications Biology and PLOS Mental Health, and has served as a reviewing expert for 60+ journals and 5 international research funding agencies.

Zoom Meeting (For participants who couldn't attend the Seminar in person)

<https://hku.zoom.us/j/6985555998?pwd=V05yTGJWNTIzazd2OFZ0Q3FRcHVkdz09>

Meeting ID: 698 555 5998 | Password: Psyc

~All are Welcome~

Enquiry: rpsvc@hku.hk