



Faculty of **Education**
The University of Hong Kong

THE NEUROPHYSIOLOGICAL BASIS OF INTERNAL ATTENTION

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Registration

OCTOBER 16, 2026 (FRIDAY)

12:45 – 14:00

**ROOM 408–410, MENG WAH COMPLEX,
HKU**

CHAIR: PROFESSOR GUANG OUYANG



Abstract:

Understanding the neural basis of internal attention is an emerging topic in contemporary cognitive neuroscience. In an era dominated by experimental models in cognitive neuroscience that focus on external processes, the study of internal cognition faces a unique challenge: how can our inner experience be measured and attributed to neural signals? This is relevant in educational settings, wherein learning complex concepts often require an ability to shift between external (e.g., reading the material) and internal (e.g., contextualizing it by recalling relevant topics from memory) processes. In this talk, I will discuss the neurophysiological basis of internal attention based on insights afforded by paradigms designed to tackle this challenge combined with scalp and intracranial EEG recordings. Specifically, I will review work highlighting internal attention broadly, the switching between attention states and the maintenance of attention states.

About the speaker:

Professor Julia Kam is an Associate Professor of Psychology and a full member of the Hotchkiss Brain Institute at the University of Calgary. She completed her PhD at the University of British Columbia and trained as a postdoctoral fellow at the University of California, Berkeley. Her lab aims to develop a mechanistic model of the neural basis of internal attention, and to ultimately drive the development of tools that optimize attentional control. In particular, the lab studies how the human brain processes internal representations and aims to translate this research to applied and clinical contexts, including predicting attention states in the real world and studying this in psychiatric and neurological populations.

All are welcome