



Department of Psychology
The University of Hong Kong

香港大學心理學系

Departmental Seminar

Monocular, Binocular and Dichoptic Integration of Motion Signals in Amblyopia

11:00 a.m. – 12:00 noon | March 28, 2025 (Friday)

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



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Abstract

Amblyopia is a neurodevelopmental disorder which causes the brain to suppress the vision of one eye, resulting in dysfunctional binocular vision. This dysfunction can be critical for perceiving motion in depth. Recent studies have shown that it is more globally motion perception as a whole which is defective in amblyopia. I will present studies in which we used well-known motion illusions: the Flash-Lag Effect, the Flash-Grab Effect, and the High-Phi Effect to assess the integration of motion signals in amblyopia monocularly (when one eye only sees the stimulus), binocularly (when the two eyes see the stimulus), and dichoptically (when the two eyes see different parts of the stimulus).

About the Speaker

Alexandre Reynaud obtained a PhD in Neurosciences from Aix-Marseille Université (France) and a MSc in Computer Sciences from Université de Nice Sophia-Antipolis (France). His research focuses on human visual perception and particularly binocular vision. To study those, he develops computer-based psychophysics, behavioral experiments. His research also focuses on a more clinical/translational aspect: the study of amblyopia, a neurodevelopmental condition which emerges during childhood and results in deficit of binocular vision. He tries to understand and develop treatments for this condition based on digital technologies and digital therapies.

~All are Welcome~

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