Psychophysics of Binocular Rivalry

For: Honours only

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Binocular rivalry refers to the perceptual alternation that occurs every few seconds when conflicting visual stimuli are presented, one to each eye. The phenomenon has attracted interest in clinical contexts due to repeated demonstrations that perceptual switch rate is slower in subjects with bipolar disorder than in healthy controls. Binocular Rivalry Online (BRO; www.binocularrivalryonline.com) is an online platform we have developed for application in large-scale genetic and clinical studies of binocular rivalry. This project will examine psychophysical aspects of binocular rivalry that are relevant to further validating the BRO platform. The student will learn about binocular rivalry and be trained in its psychophysical assessment in humans, as well as in psychometric interview techniques, data collection and analysis techniques, and research writing.