**How visual spatial attention alters perception**

Visual attention is essential for visual perception. Spatial attention allows us to grant priority in processing and selectively process information at a given location. In this talk, I will compare and contrast two kinds of spatial attention: covert (allocated to the target location, without accompanying eye movements) and presaccadic (allocated to the location of the upcoming saccade’s target). First, I will highlight some behavioral and neuroimaging research on covert attention, which alters performance and appearance in many basic visual tasks. Second, I will review studies showing that presaccadic attention improves performance and alters appearance at the saccade target location. Further, these modulations change the processing of feature information automatically, even when it is detrimental to the task at hand. We propose that saccade preparation may support transaccadic integration. Third and last, I will discuss similarities and differences between underlying mechanisms of covert attention and presaccadic attention. Systematically investigating their common and differential characteristics has furthered our understanding of the pervasive selective processing of information, which enables us to make sense of our complex visual world.