



University
of Victoria

PHYSICS AND ASTRONOMY COLLOQUIUM (In Person & Online)

Dr. Mayank Mehta
UCLA

“Neurophysics of space-time & memory”

Abstract

“All animals must find their way through space, at specific times, and remember the event. How does the brain do that? Typical experiments require careful control and manipulation of the underlying variables, how does one measure and manipulate spatial experience? I will share some recent developments in the field of neurophysics that address these questions. The use of virtual reality allows manipulation and deconstruction of spatial experience and novel microelectrodes allow the measurement of neural signals as the subjects make sense of the virtual space. Remarkably, the brain responds in surprising ways to the VR experience, which may have long-term effects on brain health. These insights require a synergistic, theory-experiment approach, and it points to novel treatments for learning and memory disorders.”

Wednesday, October 26, 2022

3:30 p.m. PDT

Bob Wright Centre B150

Zoom link available on Uvic Event Calendar