

The University of Hong Kong  
Department of Psychology

*Departmental Seminar*

***HONEYBEES: VISION, NAVIGATION,  
PSYCHOPHYSICS AND ROBOTICS***

Date: Jul 2, 2013 (Tuesday)

Time: 11:30 a.m. – 12:30 p.m.

Venue: Room 8.13, 8/F The Jockey Club Tower, Centennial Campus,  
HKU

Speaker: Professor Mandyam V. Srinivasan

Professor

Queensland Brain Institute and School of Information Technology  
and Electrical Engineering

University of Queensland

Flying insects and birds are remarkably adept at seeing and perceiving the world and navigating effectively in it, despite possessing a brain that weighs less than a milligram and carries fewer than 0.01% as many neurons as ours does. This presentation will describe our recent progress in understanding how honeybees use their vision to control regulate their flight speed, avoid mid-air collisions with other flying insects, and perform smooth landings, using computational principles that are often elegant, simple, and unprecedented. It will also outline our recent progress in understanding visually guided flight in birds, and conclude with an update of our advances in the design, construction and testing of biologically inspired vision systems for autonomous aerial vehicles.