



Western University
Department of Physics and Astronomy

PHYSICS & ASTRONOMY COLLOQUIUM

Date: **Thursday, 29 November 2018**
Time: **1:30 p.m.**
Location: **Physics & Astronomy Seminar Room 100**

Dr. Ali Khan

Departments of Medical Biophysics and Medical Imaging / Robarts Research Institute
Western University

“Computational neuroanatomy with magnetic resonance imaging”

ABSTRACT

Advances in imaging technology, including ultra-high field MRI, are giving us the capability to probe the brain at unprecedented resolution. This provides an opportunity to address pressing clinical problems, such as the detection of subtle structural abnormalities for surgical treatment of epilepsy, and the investigation of imaging biomarkers for neurodegenerative diseases. Our group is developing computational techniques in neuroimaging to address these challenges, paying particular attention to brain anatomy from the microscopic to the mesoscopic scale. This talk will highlight our current work in structural modelling of the hippocampus, which makes use of ultra-high field 7 Tesla MRI, advanced diffusion MRI, and 3D histology.

HOST: A. Soddu

COFFEE + light snacks will be available in the Atrium, 2nd floor, at 1:15 p.m.