



Western University
Department of Physics and Astronomy

PHYSICS & ASTRONOMY COLLOQUIUM

Date: **Thursday, 15th November 2018**
Time: **1:30 p.m.**
Location: **Physics & Astronomy Seminar Room 100**

Dr. Stéphane Courteau

Department of Physics, Engineering Physics and Astronomy
Queen's University

"Puzzles in galaxy scaling relations"

ABSTRACT

Galaxies like our Milky Way can be described in terms of their structure, dynamics, and stellar populations. Some very robust correlations between galaxy structural properties, such as total luminosity, maximum circular velocity, and size display rather small scatter, hinting at well-regulated galaxy formation processes. A major challenge to understanding these scaling relations, their tight scatter, and ultimately galaxy formation and evolution, is the elusive interplay between visible and dark matter. I will present the latest results on galaxy scaling relations in order to constrain modern structure formation models as well as the nature and distribution of dark matter in galaxies.

HOST: S. Metchev

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