



UNIVERSITY OF ALBERTA
FACULTY OF MEDICINE & DENTISTRY



BME SEMINAR

Department of Biomedical Engineering

Date: September 7, Thursday 2017

Time: 2:00 PM – 3:00 PM

Venue: 2F1.04 WMC Classroom D

Advanced Flow Hemodynamic Assessment of Cardiovascular Disease by 4D Flow MRI: Evolving Precision Medicine with Cardiovascular MRI

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Abstract:

Magnetic resonance imaging (MRI) has become a well established clinical tool for the evaluation of cardiovascular diseases such as congenital diseases, aortic valve disease, aortopathies. MRI can provide anatomic and hemodynamic information complementing the standard-of-care imaging performed by Doppler echocardiography and computed tomography. In particular, cardiovascular flow hemodynamics can be assessed using 2D (through plane velocity) and 4D flow (three components of velocity vector + time) MRI which allows the evaluation of complex flow patterns. This presentation will introduce and discuss the evolution of new hemodynamic markers and analysis strategies obtained from 4D flow MRI data for the assessment of cardiovascular diseases.

All Are Welcome