



Mathematics Society of
University of Sri Jayewardenepura
cordially invites you to a lecture on

**FROM CALCULUS OF VARIATIONS TO OPTIMAL
CONTROL THEORY**

conducted by guest lecturer

Dr. Sivaguru S. Sritharan,
Provost & Vice Chancellor,
Air Force Institute of Technology, OH, USA

at **M2 Lecture Theatre**
on **December 20, 2017 at 10.30 a.m.**

Abstract:

Calculus of variations and optimal control theory have numerous applications in engineering, physics and economics. In this talk we will start with introductory calculus of variations and optimal control and give a perspective on the range of applications of this subject. Calculus of variations is at the heart of many of the developments in mechanics and physics including fluid dynamics and general relativity. Recent research in control of fluid dynamics, turbulence estimation, weather prediction, control of magneto-hydrodynamics, etc., can be easily understood by viewing the problems as optimal control of infinite dimensional systems with various constraints.