

***TOPOLOGY AND GEOMETRY SURVEY
SERIES***

Guest Speaker: Liviu Nicolaescu
University of Notre Dame

Date: Tuesday, September 18, 2018

Time: 11:45 AM

Location: 125 Hayes-Healy Hall



Lecture Title:

Normal cycles and curvature measures, Lecture 1

Abstract

The curvature measures, first introduced by H. Minkowski under the name of quermassintegrals, have turned up in various unexpected places such as Weyl's tube formula and various Crofton-type formulas. The modern definition of these measures, is through the normal cycle, an object Morse theoretic in nature, associated to "reasonably singular" subsets of an Euclidean space and introduced independently and by different means by J. Fu and Kashiwara-Schapira. In these lectures I hope to give you a tour of the eclectic world of normal cycles, curvature measures and singular Morse theory.