

Colloquium

University of Notre Dame
Department of Mathematics

Liviu Nicolaescu - University of Notre Dame

Speaker: Liviu Nicolaescu

University of Notre Dame

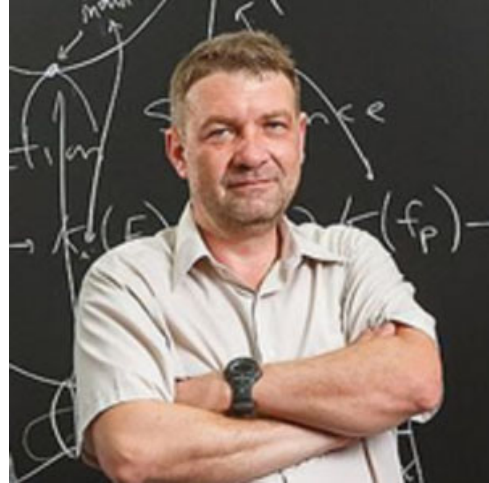
Will give a lecture entitled
Morse functions "zoology"

Date: Wednesday, November 9, 2022

Time: 4:00 PM

Location: 231 Hayes-Healy Hall

Zoom URL: [notredame.zoom.us/j/99986867672?
pwd=Z2NJRIZwL0dTRONxbk50NEIHK0dNdz09](https://notredame.zoom.us/j/99986867672?pwd=Z2NJRIZwL0dTRONxbk50NEIHK0dNdz09)



Departmental Tea: Tea in Room 257 (lounge in Hurley Hall) at 3:30 p.m.

Abstract:

The classical Morse theory could be viewed as the "anatomy" of a given Morse function. Arnold coined the term "zoology" of Morse functions when referring to investigations of the ensemble of Morse functions, such as the complexity and diversity of the Morse "fauna". I will survey some of the zoological progress of the past two decades and the unexpected connections with other areas of mathematics, all supporting Arnold's pronouncement that "one does not know how interesting a problem is until one tries to solve it".