INSALATE DI MATEMATICA

presents

21/12/2022

APPOLLONI LUIGI Università degli Studi di Milano Bicocca How many solutions a PDE's can have?



Abstract: Over the past decades, one of the most active research fields in mathematics has been the study of the existence and multiplicity of solutions to nonlinear PDE's. In the first part of this talk, we will introduce the notion of the Lusternik-Schnirelmann category and of the Krasnoselskii genus. Later, we will discuss how these objects are useful for studying the number of solutions a Partial Differential Equation can have. Time permitting, we will also see how these theories can be applied to non-local PDE's.

Keywords: PDE's · Variational Methods · Nonlinear Analysis · Critical Point Theory

Dipartimento di Matematica e Applicazioni Università degli Studi Milano Bicocca U5-3014 4.00 pm (CET)

٨

"Obvious" is the most dangerous word in mathematics. (Eric Temple Bell)