ANNUNCIO SEMINARIO

"KCC theory and Jacobi Stability for Second Order Differential Equations"

Professoressa Paul Blaga

Faculty of Mathematics and Computer Sciences, Babes Bolyai University, Cluj Napoca, Romania

06/05/2024 ore 10:00

Aula Seminari ex Dipartimento di Matematica

abstract

The aim of this presentation is to present an overview of a geometric theory of second order ordinary differential equations, in which the original system of equation is regarded as being the geodesic equations associated to a connection. Besides, to the connection we associate several tensor fields, encoding the dynamics of the system described by the differential equations. One of this tensors provides information about the so-called Jacobi stability of the trajectories of the system. Unlike the Lyapunov stability, describing the stability of a single orbit, the Jacobi stability deals with the geodesic flow as a whole and tells us whether two nearby trajectories of the dynamical system stay close or not. We shall review some of the results obtained, insisting of those obtained in collaboration with Cristina Blaga and Tiberiu Harko.

Tutte le persone interessate sono invitate al seminari

Per informazioni, contattare il Prof Piero Montecchiari Email p.montecchiari@univpm.it