Nonholonomic systems and the inverse problem

Marta Farré Puigallí

(University of Antwerp)

December 15, 2021
17:30-18:30h online via Zoom
Analysis & Geometry Seminar, Antwerpen

The inverse problem addresses the question of whether or not a system of second order ordinary differential equations is equivalent to a regular Lagrangian system. If this is the case then we say that the system is variational. EDS (exterior differential systems) techniques have been used to identify variational cases. I will present a notion of variationality for constrained systems, in particular nonholonomic systems, and discuss the possible application of EDS techniques in this constrained case.