UNIVERSIDAD DE GRANADA

Máster Universitario en Matemáticas

## Conferencia en Seminario de Jóvenes Investigadores

09/10/2020

Charla de Manuel Garzón (Universidad de Granada ) el próximo jueves 15 de octubre a las 12:00 por Google Meet

Titulo: Nonlinear Analysis techniques for the Lorentz force equation

In Special Relativity, LFE models the motion of a charged particle under the influence of an electromagnetic (E,B) field and it is one of the fundamental equation of Mathematical Physics. However, most of the studies on the dynamics of LFE are limited to the identification of exact solutions for particular cases of simple electromagnetic fields. One of the main reasons of this abscense of qualitative results is that a neat and rigorous variational approach is not available up to the date. It shall be presented a Critical Point Theory for regular potentials and a Topological Degree result for singular cases.