

Alberto Abbondandolo

“Geodesic flows”

and a very generic abstract:

Geodesic flows are one of the favourite playgrounds for people working in dynamics: they are simple to describe, easy to visualise and can exhibit a wide range of behaviours. They can be seen as special classes of Hamiltonian systems, but actually they are able to describe the motion on high energy levels of any classical Hamiltonian system, provided that one enlarges the class of metrics and includes Finsler ones.

In these lectures I will present some classical theorems about geodesic flows, in particular concerning closed geodesics, together with some more recent results.