

Floer homology for b -symplectic manifolds

Joaquim Brugués (UPC-UAntwerpen)

December 6, 2023

16:00–17:00 on campus in M.G.004

Analysis & Geometry Seminar, Antwerpen

The field of b^m -symplectic geometry studies geometrical, topological and dynamical properties of a particular class of Poisson manifolds. In this talk we provide an overview of the work of my thesis. First, we will present an approximation to the study of the Arnold conjecture on this setting. We will see a possible approach using a desingularization technique, and then we will see a construction of a Floer complex for certain Hamiltonians.

Then we will present the notion of a b -integrable system, and investigate the family of b -semitoric systems through a couple of examples.