UMBERTO HRYNIEWICZ, Universidade Federal do Rio de Janeiro
Index pairs associated to finite-energy foliations

A finite-energy foliation for a Reeb flow on a 3-manifold, as introduced by Hofer, Wysocki and Zehnder, is a special kind of foliation of its symplectization: leafs are either cylinders over certain periodic orbits, called binding orbits, or project onto transverse Seifert surfaces for some of the binding orbits. In this talk I would like to explain how to find Conley index pairs using such a foliation, and present applications. Typical applications include problems in celestial mechanics, like the Euler problem.