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Closed Reeb orbits and symplectically degenerate maxima

ZEIT:
26.6.2013, 16:30 Uhr

ORT:
Institut für Mathematik
Rudower Chaussee 25
Raum I.013

The notion of symplectically degenerate maxima describes periodic orbits of Hamiltonian systems with special properties. These orbits turn out to be essential ingredients for proving the Hamiltonian Conley conjecture, i.e. establish the existence of in nitely periodic orbits of Hamiltonian systems on certain symplectic manifolds.
Using relations between Hamiltonian Floer homology and contact homology, this notion can be carried over to the Reeb ow in contact homology. Similarly to the Hamiltonian case, the existence of such a symplectically degenerate maximum implies the existence of in nitely many closed Reeb orbits on
certain contact manifolds. Furthermore, this proof implies the recent result of Cristofaro-Gardiner and Hutchings on the existence of at least two closed Reeb orbit for any contact form supporting the standard contact structure on the three-sphere.
I will sketch the proof of the Hamiltonian Conley conjecture and how it can be carried over to the Reeb ow in order to achieve these results for the Reeb ow. The contact part of the talk is joint work with V. Ginzburg, U. Hryniewicz and L. Macarini.