Ruhr-Universität Bochum

Fakultät für Mathematik
Prof. Dr. Gerhard Knieper

**Vortragsreihe des SFB CRC/TRR 191
„Symplectic Structures in Geometry,
Algebra and Dynamics"**

REFERENT: Leonid Polterovich
              (Tel Aviv University)

THEMA: Instabilities in Hamiltonian dynamics and
              symplectic topology I, II

ZEIT: Mittwoch, 04.10.17 und Mittwoch, 11.10.17
              16 Uhr c.t.

ORT: Raum NA 5/64

Abstract:
In the 1st lecture, we discuss an existence mechanism, based on symplectic topology, for orbits of Hamiltonian flows connecting a pair of disjoint subsets in the phase space. We show an application to superconductivity channels in nearly integrable systems (joint with Michael Entov).

In the 2nd lecture, we focus on applications of theory of persistence modules, an algebraic technique originated in topological data analysis, to geomety and dynamics of Hamiltonian diffeomorphisms (joint with Egor Shelukhin).

The lectures are independent.

Hierzu sind alle Interessierten herzlich eingeladen!