

SFB Colloquium

TIME:

14 Dec 2010, 16:00 - 19:00

LOCATION:

HU Institut für Sportwissenschaft Philippstr. 13, 10115 Berlin (Mitte) Haus 11, Hörsaal 5

PROGRAM:

16:00 - 17:00 Ruben Minasian (CEA Saclay/ France)

String vacua and generalized complex geometry

I'll review some applications of Generalized complex geometry to string theory compactifications.

17:00 - 17:30 Coffee Break

17:30 - 18:30 Dr. Sonja Hohloch (Stanford)

Homoclinic points and Floer homology

Homoclinic points are the intersection points of the stable and unstable manifold of a hyperbolic fixed point. The existence of transverse homoclinic points was discovered by Poincare around 1890 when he worked on the n-body problem.

Floer homology is a quite recent concept in symplectic geometry and Hamiltonian dynamics. It provides important symplectic invariants and existence results for periodic Hamiltonian orbits.

We link both topics by constructing a Floer homology generated by homoclinic points. Then we will discuss some properties like invariance, flux and growth under iteration.

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