

Analysis/Dynamical Systems Seminar

Thursday, April 28, 2016

4:00-4:50 pm in Hume 331

Computations in symplectic geometry

Luís Diogo

Columbia University

Symplectic manifolds are a generalization of the notion of phase space in classical mechanics. Their study has received a lot of attention in recent years, and they relate to many other areas in mathematics, including dynamics, algebraic geometry and mathematical physics. We will discuss a central tool in symplectic geometry, called Hamiltonian Floer homology. It is quite useful, but also hard to compute, and we will explain how to calculate it in a relevant class of examples. This is joint work with Sam Lisi.