GRADUATE COLLOQUIUM

Wednesdays, 13-15 (FIM Tea to follow)

Hermann Weyl Zimmer (HG G43, ETH Zentrum)

Speaker: **Fabian Ziltener**

Title: **Vortices and Gromov-Witten Invariants**

Date: Wednesday, December 3rd

Abstract: In 1985, M. Gromov introduced the notion of J-holomorphic curves into symplectic geometry, for which they have proved to be a most powerful tool. The Gromov-Witten invariants of a symplectic manifold (M, ω) are given by the number of J-holomorphic curves that represent a fixed homology class and at given points pass through given submanifolds of M. The symplectic vortex invariants on the other hand are associated to a symplectic manifold (M, ω) with a Lie group G acting on M in a Hamiltonian way.

In this talk I will give a rough description of both invariants and I will explain what the relation between the two is. The style of this presentation will be very informal.

`http://www.math.ethz.ch/graduate/colloquium`

email : `gradcoll@math.ethz.ch`