ZURICH GRADUATE COLLOQUIUM

Wednesdays, 13-15 (FIM Tea to follow)

Hermann Weyl Zimmer (HG G43, ETH Zentrum)

Speaker: **Alexandru Oancea**

Title: **A differential topology approach to the Leray–Serre spectral sequence**

Date: Wednesday, April 28th

Abstract: The Leray–Serre spectral sequence is an algebraic tool which encodes information on the homology of the total space of a fibration in terms of the homologies of the base and of the fiber. The purpose of the talk is to explain its construction in terms of Morse homology. The latter is a refinement of classical Morse theory and gives a recipe for the computation of the homology of a manifold in terms of critical points and gradient trajectories of a smooth function.

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

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