

**Ricci flow, coupling of Brownian motions and Perelman's  $L$ -functional**

**Robert Philipowski** (University of Bonn, Germany)

Time **Tuesday, Febr 22, 2011 at 17:00**

Place **Campus Kirchberg, room B02**

In this talk I will show that on a manifold whose Riemannian metric evolves under backwards Ricci flow two Brownian motions can be coupled in such a way that their normalized  $L$ -distance is a supermartingale. As a corollary, one obtains a new proof and a generalization of a recent result of Peter Topping concerning  $L$ -optimal transport. This is joint work with Kazumasa Kuwada.