

SANTA BARBARA • SANTA CRUZ

Geometry, Topology, and Physics Seminar

Ricci Flow and Renormalization, II

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Friday, February 2, 2007, 3:30 p.m. Room 6635 South Hall

Abstract: 25 years ago, Friedan calculated the one-loop renormalization of a two-dimensional sigma-model with target space an arbitrary Riemannian manifold and found that the metric should evolve by Ricci flow. We will explain this result and its connections to the recent work of Perelman on Ricci flow. Since the first lecture of this series, the connection between Perelman's work and renormalization has been extended by Tseytlin (http://arXiv.org/abs/hep-th/0612296), and we will discuss this new work as well.

Information about future meetings of this seminar can be found at http://www.math.ucsb.edu/~drm/GTPseminar/