Massachusetts Institute of Technology Department of Mathematics

LUNCH SEMINAR FOR GRADUATE STUDENTS

Monday, April 29, 2013 12:00 - 1:00 PM

ROOM 2-143

William Minicozzi (MIT)

"Geometric Flows"

Abstract

The curve shortening flow, mean curvature flow and Ricci flow are nonlinear geometric heat equations where a geometric object (a curve, a surface or a metric) evolves over time. In each case, the flow is smoothing for some short amount of time, but the nonlinearities dominate after some time and singularities can occur. The key to understanding these flows is to understand the possible singularities.

Followed by pizza in room 2-290