## Stanford Department of Mathematics SUMO Speaker Series

Tuesday, February 21st 5:30 - 6:20PM, Ricker Dining Green Room (238 Santa Teresa St.) Please feel free to bring in dinner from Ricker Dining before the talk.

**Curve-Shortening Flow** 



**Evangelie Zachos** 

## Abstract

Today we'll talk about one of the simplest kinds of geometric flows: curve-shortening flows. A flow takes a curve at time 0 and evolves it, giving a slightly different curve for times in the future. We will look at examples of curves in the plane, define the flow, and discuss how the flow changes them. What does it mean for a flow to become singular? What kinds of behavior can we expect if a flow exists for all time? More broadly, we will talk about why geometers study geometric flows and what kinds of applications there are.

http://sumo.stanford.edu/speakers.html