GEOMETRIC ANALYSIS SEMINAR

"On the existence of ancient solutions to mean curvature flow"

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Abstract: In this talk I will discuss recent results on the existence of ancient solutions to mean curvature flow. I will describe our recent construction and classification of rotationally symmetric ancient 'pancake' solutions and of a new family of translating solutions. Moreover, by using ideas developed in these constructions, we have been able to prove that the only convex ancient solutions to curve shortening flow are the stationary lines, shrinking circles, Grim Reapers and Angenent ovals, completing the classification initiated by Daskalopoulos, Hamilton, and Sesum and X.-J. Wang. This is joint work with with Bourni and Langford.

Wednesday, April 3rd, 2019 MIT, Room 2-131 Time: 4:00 PM

