

Columbia University
Department of Mathematics
Fall 2008

Joseph Fels Ritt Lectures

Gerhard Huisken

Max Planck Institute for Gravitational Physics
Albert Einstein Institute, Potsdam

Thursday, December 11

Mean curvature flow with surgeries

The lecture discusses joint work with Carlo Sinestrari on mean curvature flow with surgery for hypersurfaces satisfying mild convexity properties.

It will describe key techniques such as a priori estimates and surgery constructions as well as geometric applications.

Friday, December 12

Inverse mean curvature flow and isoperimetric inequalities

The lecture discusses inverse mean curvature flow and its applications to sharp inequalities of isoperimetric type. The lecture discusses both analytical aspects of the flow and applications in Riemannian Geometry and General Relativity.

312 Mathematics Building
4:00 p.m. Both days

Tea will be served at 3:15 p.m. 508 Mathematics Building - Both days