DIFFERENTIAL GEOMETRY/PDE SEMINAR

WEDNESDAY, OCTOBER 15, 2015
PADELFORD C-36
4PM–5PM

Skew Mean Curvature Flow

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The skew mean curvature flow(SMCF) or binormal flow, which origins from the study of fluid dynamics, describes the evolution of a codimension two submanifold along its binormal direction. In this talk, I will show the basic properties of the SMCF and prove the existence of a short-time solution to the SMCF of surfaces in Euclidean space R^4 . If time permits, I will also talk about a generalized Hasimoto transformation, which transforms the SMCF to a non-linear Schrödinger system.

For more information about this seminar, visit the DG/PDE Seminar Web page (from the Math Department home page, `www.math.washington.edu`, follow the link **Seminars, Colloquia, and Conferences**).