

COLLOQUIUM
UNIVERSITY OF PITTSBURGH
FRIDAY, MARCH 7, 2008
704 THACKERAY HALL
4:00 P.M.

PROFESSOR XIAOBO LIU
UNIVERSITY OF NOTRE DAME

MEAN CURVATURE FLOWS FOR ISOPARAMETRIC SUBMANIFOLDS

ABSTRACT: Mean curvature flows for compact convex hypersurfaces have been extensively studied in 1980's. But for submanifolds with higher codimensions, the mean curvature flow has not been well understood. In this talk, I will present a joint work with Chuu-Lian Terng on mean curvature flows for isoparametric submanifolds of arbitrary codimension. Isoparametric submanifolds were introduced by Elie Cartan and are characterized as submanifolds with constant principal curvatures. We proved that the mean curvature flow for any compact isoparametric submanifold always converges to a lower dimensional submanifold in finite time.

Refreshments served at 3:30 p.m.
in the Math Dept. COMMON ROOM, Thackeray 705