DIFFERENTIAL GEOMETRY/PDE SEMINAR

Wednesday, April 21
Communications 326
3:45 pm

The free-boundary in the Gauss curvature flow with flat sides

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We will discuss the motion of a compact weakly convex two-dimensional surface Σ with flat sides under the Gauss Curvature Flow. We will show that under certain conditions on the initial surface $\Sigma(0)$, the Gauss Curvature Flow admits a solution $\Sigma(t)$, in $0 < t \leq T$, for some time $T > 0$, and the junction curve $\Gamma(t)$ between the flat and the strictly convex side is a smooth free-boundary, propagating with finite speed.