“Rotational symmetry of uniformly 3-convex translating solitons of mean curvature flow”

Abstract

In the regime of mean convex mean curvature flow, singularity models are known to be convex, non-collapsed ancient solutions by White’s theory. Furthermore, singularity models arise as Hamilton’s blow-up limit must be translating solitons by his Harnack estimate. In this talk, we will show that uniformly 3-convex translating solitons of mean curvature flow in $\mathbb{R}^{n+1}$ which arise as blow-up limit of embedded, mean convex mean curvature flow must have SO($n-1$) symmetry.