MASSACHUSETTS INSTITUTE OF TECHNOLOGY DEPARTMENT OF MATHEMATICS

Geometric Analysis Seminar

Wednesday, October 5, 2022 4:00 PM - 5:00 PM 2-131

Jingze Zhu

(Columbia University)

"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 K^{n+1} which arise as blow-up limit of embedded, mean convex mean curvature flow must have SO(\$n-1\$) symmetry.