Department of Mathematics
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Joint Geometric Analysis Seminar

(Part of MIST program)

Classification of bubble-sheet ovals in R^4

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Abstract

Ancient solutions appear as singularity models of mean curvature flow. In this talk, I will discuss the classification of bubble-sheet ovals in R^4 (my joint work with Beomjun Choi, Toti Daskalopoulos, Robert Haslhofer and Natasa Sesum). Bubble-sheet ovals are ancient non-collapsed solutions of MCF whose tangent flow at $-\infty$ is R$^2 \times$ S^1 and has inward quadratic bending asymptotic. We prove that they belong to either the O(2)×O(2)-symmetric ancient oval constructed by White, or belong to the one-parameter family of Z$_2^2$×O(2)-symmetric ancient ovals constructed by Robert Haslhofer and myself.

Date: Dec 1, 2023 (Friday)
Time: 11:00am-noon (Hong Kong time)
ZOOM link: https://cuhk.zoom.us/j/91805734715

All are Welcome