1070-35-180

Longzhi Lin* (lzlin@math.jhu.edu), Department of Mathematics, Johns Hopkins University, 3400 N Charles Street, BALTIMORE, MD 21218, and Ling Xiao. Modified Mean Curvature Flow of Star-shaped Hypersurfaces in Hyperbolic Space.

I will talk about my recent work on the modified mean curvature flow (MMCF) of star-shaped hypersurfaces in hyperbolic space with fixed prescribed asymptotic boundary at infinity. As an application, this recovers the existence and uniqueness of smooth complete hypersurfaces of constant mean curvature in hyperbolic space with prescribed asymptotic boundary at infinity, which was first shown by Guan and Spruck. This is joint with Ling Xiao of The Johns Hopkins University. (Received February 10, 2011)