讲座摘要

Curvature flow for hypersurfaces is a powerful tool in modern mathematics. In this talk, we discuss various curvature flows for hypersurfaces in hyperbolic space and their applications to geometric inequalities, including contracting curvature flows, the inverse curvature flows, quermassintegral preserving curvature flows, and locally constrained curvature flows. Our talk is based on my joint works with Ben Andrews (ANU), Yong Wei (USTC), Changwei Xiong (SCU) and Yingxiang Hu (Beihang U.).