

1148-51-178

Wenbo Li* (liwenbomaths@gmail.com). *Quasisymmetric Embeddability of Weak Tangents.*

A weak tangent of a metric space is a "blown up" space (in the sense of pointed Gromov-Hausdorff limit) near a point. In this talk, we study the quasisymmetric embeddability of weak tangents of metric spaces.

We first show that quasisymmetric embeddability is hereditary, i.e., if X can be quasisymmetrically embedded into Y , then every weak tangent of X can be quasisymmetrically embedded into some weak tangent of Y , given that X is proper and doubling. However, the converse implication is not true in general; we will illustrate this with a counterexample. In special situations, we are able to show that the embeddability of weak tangents implies the global or local embeddability of the ambient space. Finally, we apply our results to expanding dynamics and establish several results on limit sets of Kleinian groups and visual spheres of expanding Thurston maps. (Received February 05, 2019)