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Jing Tao* (jing@math.utah.edu). *Hyperbolic directions in Teichmuller space equipped with the Lipschitz metric.*

In an unpublished manuscript, Thurston introduced an asymmetric metric on Teichmuller space $T(S)$ of a surface S , which we call the Lipschitz metric, by considering the best Lipschitz maps between two hyperbolic structures on S . Much like the Teichmuller metric, the Lipschitz metric is not Gromov hyperbolic. In the Teichmuller metric, the hyperbolic directions or geodesics to which the closest-point projection is strongly contracting are well understood. Namely, a Teichmuller geodesic has strongly contracting property if and only if it stays in the thick part of $T(S)$. In the Lipschitz metric, this characterization is false: there are Lipschitz geodesics which stay in the thick part but do not have strongly contracting property. In this talk, we will provide a sufficient condition for a Lipschitz geodesic to have strongly contracting property. This is joint with Anna Lenzhen and Kasra Rafi. (Received September 15, 2011)