1016-53-108Zhongmin Shen* (zshen@math.iupui.edu), Math Dept, IUPUI, 402 N. Blackford Street,
Indianapolis, IN 46202-3216. Rigidity Theorems in Finsler Geometry.

Recent studies in Finsler geometry show that Finsler metrics on a closed manifold have some rigidity properties when certain curvature conditions are satisfied. For example, there are many non-trivial Finsler metrics of negative constant flag curvature, some are incomplete, some are (positively) complete, some are reversible and some are irreversible. But Finsler metrics of negative constant flag curvature on a closed manifold must be Riemannian. In this lecture, I will discuss several global rigidity theorems. (Received February 06, 2006)