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Zhongmin Shen* (zshen@math.iupui.edu), Department of Mathematical Sciences, IUPUI, 402 N Blackford Street, Indianapolis, IN 46202. *Projectively Flat Metrics*.

A metric on a domain in Euclidean space is said to be projectively flat if its geodesics are straight lines. The Beltrami theorem says that a Riemannian metric is locally projectively flat if and only if it is of constant sectional curvature. The notion of sectional curvature can be extended to general regular metrics — Finsler metrics. However, the Beltrami theorem is no longer true for Finsler metrics. There are projectively flat metrics of non-constant flag curvature and there are non-projectively flat metrics of constant flag curvature. In this talk, I will talk about projectively flat metrics of constant flag curvature. (Received January 28, 2009)