

FINSLER SPACE WITH (α, β) - METRIC

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ABSTRACT

In Finsler space we see special (α, β) –metrics, such as Randers metric, Kropina metric and Matsumoto metric. etc. Locally dually at Finsler metrics arise from Information Geometry. Such metrics have special geometric properties and will play an important role in Finsler geometry. In this paper, we are going to study a class of locally dually at Finsler metrics which are defined as the sum of a Riemannian metric and 1-form. In this paper, we study the special (α, β) - metric L satisfies $L^2(\alpha, \beta) = 2\alpha^2 + \alpha\beta + 2\beta^2$, where

c^i are constants, $\alpha = \sqrt{\sum_{i,j} a_{ij}(x)y^i y^j}$ is a Riemannian metric and $\beta = b_i y^i$ is a differential 1 form.

KEYWORDS: Finsler Space, (α, β) -Metric, Special (α, β) -Metric, Locally Dually Flat Metric, Flag Curvature

AMS Subject Classification (2010): 53C60, 53B40.