

Year: 2007

Vol.: 71

Fasc.: 3-4

**Title:** On some special projectively flat  $(\alpha, \beta)$ -metrics

**Author(s):** Benling Li

In this paper, we find equations that characterize locally projectively flat Finsler metrics in the form  $F = \epsilon\beta + \alpha + \frac{3}{2}\beta \arctan(\beta/\alpha) + \frac{\alpha\beta^2}{2(\alpha^2 + \beta^2)}$ , where  $\alpha = \sqrt{a_{ij}y^i y^j}$  is a Riemannian metric and  $\beta = b_i y^i$  is a 1-form. Then we completely determine the local structure of those with constant flag curvature.

**Address:**

Benling Li  
Department of Mathematics  
Zhejiang University  
Hangzhou, 310028  
P.R. China