**Paper No: PU-SOE-MAT- 17**

**Projective Changes between Generalized (Alpha, Beta) - Metric & Randers Matrix**

**Dr.Pradeep Kumar**, T.S.Madhu & Sharath.B.R

Department of Mathematics, School of Engineering, Presidency University, Bangalore-560 064, INDIA

**Abstract**

Projective change between two Finsler metrics arises from Information Geom-etry. Such metrics have special geometric properties and will play an important role in Finsler geometry. The purpose of the present paper is to find a relation to characterize the projective change between generalized (*α*, *β*) - metric  ( μ1, μ2 and μ3 ≠ 0 are constants) and Randers metric , where α and  are two Riemannian metrics, β and  are 1-forms. Further, we study such projective change when generalized (α, β) -metric F has some curvature property.

**Keywords:**

[Finsler Space with (α](https://www.scirp.org/journal/articles.aspx?searchCode=Finsler+Space+with+(%ce%b1&searchField=keyword&page=1&SKID=0), [β) -Metric](https://www.scirp.org/journal/articles.aspx?searchCode=+%ce%b2)+-Metric&searchField=keyword&page=1&SKID=0), [Projective Change](https://www.scirp.org/journal/articles.aspx?searchCode=+Projective+Change&searchField=keyword&page=1&SKID=0), [Locally Projectively Flat](https://www.scirp.org/journal/articles.aspx?searchCode=+Locally+Projectively+Flat&searchField=keyword&page=1&SKID=0), [Randers Metric](https://www.scirp.org/journal/articles.aspx?searchCode=+Randers+Metric&searchField=keyword&page=1&SKID=0)

**Publication Details:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Journal Name** | **Vol.** | **Month & Year**  | **Page No.** | **Publisher** | **Scimago Ranking** |
| Advances in Pure Mathematics | 10(5) | May,2020 | 312-321 | Scientific Research Publishing | Web of Science Indexed |