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某类\,Finsler-Einstein\,空间之间的共形映射

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Conformal transformation between some Finsler Einstein spaces

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摘要 Liouville\,定理证明了欧氏空间到自身的共形变换是莫比乌斯变换.
关于\,Riemann\,空间，Brinkmann \,首先得到了一般的结论.
但对\,Finsler\,空间的研究乏人问津.
本文运用导航术和共形映射的性质证明了\,Randers\,空间(或\,Kropina\,空间)之间保
Einstein度量的共形变换必是相似变换.

关键词： Einstein空间   共形映射   Randers 度量   Kropina 度量

Abstract： Liouville's Theorem proved that the Euclidean space can be mapped conformally on itself only by a composition of M\"{o}bius transformations. For Riemann spaces, Brinkmann obtained general results. Little work has been done on Finsler spaces. This paper, by navigation idea and properties of conformal map, proved that the conformal transformation between Einstein Randers (or Kropina) spaces must be homothetic.

Key words： Einstein spaces   conformal maps   Randers metrics   Kropina metrics

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