A MIXED GRADIENT-TYPE DEFORMATION OF CONICS AND A CLASS OF FINSLERIAN-RIEMANNIAN FLOWS

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Dedicated to Academician Radu Miron on the occasion of his 91'th birthday

ABSTRACT. The aim of this paper is to produce new examples of (semi-) Riemannian and Finsler structures in dimension two having as model a scalar deformation of conics which involves a gradient vector field. It continues [6] from the point of view of relationship between quadratic polynomials (which provide equations of conics in dimension 2) and Finsler geometries. A type of Finslerian flow is introduced, based on the previous deformation and we completely solve the corresponding particular case of Riemannian flow.

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