ON GEODESIC MAPPINGS AND GEODESIC DEFORMATIONS OF GENERALISED RIEMANNIAN SPACES

Marija Ćirić

Faculty of Sciences and Mathematics, Visegradska 33, 18000 Nis, Serbia [marijamath@yahoo.com]

Geodesic mappings and geodesic deformations of generalised Riemannian spaces are considered. Necessary and sufficient conditions for existence of non-trivial geodesic mapping of generalized Riemannian space, as well as for existence of non-trivial infinitesimal geodesic deformation of that space are given. The existence of non-trivial infinitesimal geodesic deformation of generalized equidistant space is proved.