Title: Geodesics in a Finsler surface with one-parameter group of motions

Author(s): Nobuhiro Innami, Tetsuya Nagano and Katsuhiro Shiohama

The surfaces with one-parameter groups of motions are classified to define the Finsler surfaces of revolution. We generalize Clairaut's relation between a geodesic and parallel circles in a Finsler surface of revolution and its consequences, stating the global behavior of geodesics in a Finsler 2-torus of revolution with non-symmetric distance. As for the local behavior of geodesics in a Finsler manifold, we recall the reversibility of geodesics, using the symmetric part of the Finsler metric.

Address:
Nobuhiro Innami
Department of Mathematics
Faculty of Sciences
Niigata University
Niigata
Japan

Address:
Tetsuya Nagano
Department of Information Science
University of Nagasaki
Nagasaki
Japan

Address:
Katsuhiro Shiohama
Fukuoka Institute of Technology
Wajiro, Higashi-ku
Fukuoka
Japan