

The Isoperimetric Extremal of Rotation

Hana Chuda

Department of Mathematics, Tomas Bata University in Zlin
Czech Republic
E-mail: chuda@fai.utb.cz

ABSTRACT

In this presentation we will introduce a newly found knowledge above the existence and the uniqueness of isoperimetric extremals of rotation on 2-dimensional (pseudo-) Riemannian manifolds and on surfaces on Euclidean space. We will obtain the fundamental equations of rotary diffeomorphisms on (pseudo-) Riemannian manifolds for twice-differentiable metric tensors.