

# Existence of Finslerian Ricci Flow and Uniqueness Criteria

Behroz Bidabad\*    Maral K. Sedaghat

Department of Mathematics and Computer Science,  
Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran.

## Abstract

This paper investigates the short-time existence and uniqueness of Ricci flow solutions in Finsler manifolds. It introduces theorems establishing the existence of flow solutions across arbitrary dimensions of Finsler manifolds, along with uniqueness for isotropic cases. Additionally, the study includes two examples to illustrate its findings. Overall, the research offers new insights into Ricci flow behaviors within Finsler geometry, addressing crucial questions and paving the way for future investigations in this field.

---

\*Corresponding author [bidabad@aut.ac.ir](mailto:bidabad@aut.ac.ir)