Title: Intrinsic study of generalized horizontal recurrent Finsler connection

Author(s): Amr Soleiman and Salah G. Elgendi

The present paper provides an intrinsic generalization of a horizontally recurrent Finsler connection, which we call the generalized horizontally recurrent Finsler connection (GHRF Γ). We establish a proof of the uniqueness and existence theorem of GHRF Γ, investigate relations between the curvature and torsion tensors of Cartan and GHRF Γ, and study some geometric consequences and special cases of GHRF Γ. We give an example in some details with a special case.

Address:
Amr Soleiman
Department of Mathematics
Faculty of Science
Al Jouf University
Skaka, P. O. 2014
Kingdom of Saudia Arabia

Address:
Salah Gomaa Elgendi
Department of Mathematics
Faculty of Science
Islamic University of Madinah
Madinah, P.O. 42351
Kingdom of Saudia Arabia