Title: Some remarks on the geometry of Kropina spaces

Author(s): Ryozo Yoshikawa and Sorin V. Sabau

Using the navigation data \((h, W)\) of a Kropina space \((M, \alpha^2/\beta)\), we characterize weakly Berwald Kropina spaces and Berwald Kropina spaces by means of the Killing vector field \(W\) and the parallel vector field \(W\), respectively.

Moreover, we show that the local 1-parameter group of local Finslerian isometries on \((M, \alpha^2/\beta)\) coincides with the local 1-parameter group of local Riemannian isometries on \((M, h)\).

Address:
Ryozo Yoshikawa
Hachiman technical High School
5 Nishinosho-cho Hachiman
523-0816
Japan

Address:
Sorin V. Sabau
Department of Mathematics
Tokai University
Sapporo City, Hokkaido
005 – 8601
Japan