Year: 2011 Vol.: 78 Fasc.: 2

Title: Translation curves and their spheres in homogeneous geometries

Author(s): Emil Molnár and Brigitta Szilágyi

In this paper five 3-dimensional homogeneous geometries \mathbf{Sol} , \mathbf{Nil} , and product geometries $(\mathbf{H^2}\times,\mathbf{S^2}\times)$ are discussed. We introduce a seemingly new family of curves, called translation curves. These curves seem to be more natural in these geometries, than their geodesic lines. Visualization of the corresponding curves and spheres has also been elaborated.

Address:

Emil Molnár
Department of Geometry
Budapest University of Technology and Economics
Egry J. u. 1, H.II.22
H 1521 Budapest XI.
Hungary

Address:

Brigitta Szilágyi Department of Geometry Budapest University of Technology and Economics Egry J. u. 1, H.II.22 H 1521 Budapest XI. Hungary