

**THE SURFACES OF ROTATION GENERATED BY KILLING VECTOR
FIELD IN GALILEAN 3-SPACE**

FATMA ALMAZ AND MİHRİBAN ALYAMAÇ KÜLAHÇI

ABSTRACT. In this study, by using the metric in G_3 we constitute a similar group of rotational matrices in G_3 and we examine isometries defined in pseudo-Riemannian manifolds. Moreover, we obtain different types of rotational matrices in Galilean space, in which we will need rotational axes and hence Killing vector fields to constitute rotational matrices. Furthermore, we find Killing vector fields according to the metric in G_3 .

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Firat University
Science Faculty
Department of Mathematics
23119 Elazığ/Türkiye
E-mail address: fb_fat_almaz@hotmail.com

Firat University
Science Faculty
Department of Mathematics
23119 Elazığ/Türkiye
E-mail address: mihribankulahci@gmail.com