On The First Fundamental Theorem for Special Dual Orthogonal Group $SO(2, D)$ And its Application to Dual Bezier Curves

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Abstract

Let D be set of dual numbers. In this work we study the first fundamental theorem for special dual orthogonal transformations group $SO(n, D)$ in case of $n = 2$. Then our getting results compared the special orthogonal transformations group $SO(4, R)$ in R^4 because D^2 is isomorph to R^4 So we showed that the minimal conditions of the dual vectors are more less than minimal conditions of real vectors.

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