

Documents

Ali, A.T.^{a b}, Turgut, M.^c

Some characterizations of slant helices in the euclidean space En

(2010) Hacettepe Journal of Mathematics and Statistics, 39 (3), pp. 327-336.

^a King Abdul Aziz University, Faculty of Science, Department of Mathematics, PO Box 80203, Jeddah, 21589, Saudi Arabia

^b Mathematics Department, Faculty of Science, Al-Azhar University, Nasr City, 11448, Cairo, Egypt

^c Department of Mathematics, Buca Educational Faculty, Dokuz Eyl ul University, 35160 Buca, Izmir, Turkey

Abstract

In this work, the notion of a slant helix is extended to the space En. First, we introduce the type-2 harmonic curvatures of a regular curve. Thereafter, by using this, we present some necessary and sufficient conditions for a curve to be a slant helix in Euclidean n-space. We also express some integral characterizations of such curves in terms of the curvature functions. Finally, we give some characterizations of slant helices in terms of type-2 harmonic curvatures.

Author Keywords

Euclidean n-space; Frenet equations; Slant helices; Type-2 harmonic curvatures

Document Type: Article Source: Scopus

About Scopus What is Scopus Content coverage What do users think Latest Tutorials Contact and Support Contact and support Live Chat

About Elsevier About Elsevier About SciVerse About SciVal Terms and Conditions Privacy Policy



Copyright © 2012 Elsevier B.V. All rights reserved. SciVerse ® is a registered trademark of Elsevier Properties S.A., used under license. Scopus ® is a registered trademark of Elsevier B.V.