



16th International Geometry Symposium
July 4-7, 2018 Manisa Celal Bayar University, Manisa-TURKEY

A Generalization of Surfaces Family with Common Smarandache Asymptotic Curves in Galilean Space

Mustafa Altın¹ and Zuhall Kucukarslan Yuzbasi²

¹*Vocational School of Technical Science Bingol University, Bingol, Turkey
mustafaaltin33@hotmail.com*

²*Firat University, Faculty of Science, Department of Mathematics, Elazig, Turkey
zuhall2387@yahoo.com.tr*

Abstract

In this study, we examine how to construct surfaces family with special Smarandache asymptotic curves in G^3 . We give the family of surfaces as a linear combination of the components of the Galilean frame and derive the conditions for coefficients to hold both the asymptotic and the isoparametric requirements. Finally, by using generalized marching-scale functions, we illustrated some surfaces about our method.

Keywords: Galilean space; Asymptotic curve; Smarandache curve.

References

- [1] H.S. Abdel-Aziz and M. K. Saad, Smarandache curves of some special curves in the Galilean, *Infinite Study*, 2015.
- [3] E. Bayram, F. Guler and E. Kasap, Parametric representation of a surface pencil with a common asymptotic curve, *Comput. Aided Des.*, **44**(7): 637-643, 2012.
- [4] M. Turgut and S. Yilmaz, Smarandache Curves in Minkowski Space-time, *Int. J. Math. Comput.*, **3**: 51-55, 2008.
- [2] Z.K. Yuzbasi, On a family of surfaces with common asymptotic curve in the Galilean space G^3 , *J. Nonlinear Sci. Appl.*, **9**: 518-523, 2016.