Laplace-Beltrami operator of a helicoidal hypersurface in 4-space

Erhan Güler

Bartın University, Turkey eguler@bartin.edu.tr

Martin Magid Wellesley College, USA mmagid@wellesley.edu

Yusuf Yaylı Ankara University, Turkey yayli@science.ankara.edu.tr

ABSTRACT

In this talk, we introduce helicoidal hypersurface in the four dimensional Euclidean space. We calculate the mean and the Gaussian curvature, and some relations of the helicoidal hypersurface. Then we give the Laplace-Beltrami operator of the helicoidal hypersurface.