

Solution of the Björling Problem for Spacelike Surfaces in \mathbb{L}^4

SEHER KAYA*

*Ankara University, Ankara

Björling formula is a way to obtain a minimal surface using a curve called the core curve. Then the problem is considered in the Lorentz-Minkowski space for maximal surfaces and also timelike minimal surfaces. Also it is possible to deal with the problem in four dimensional spaces. Now using the Björling formula we obtain new examples of the spacelike zero mean curvature surfaces in \mathbb{L}^4 and give the explicit parametric equations of the surfaces.

REFERENCES

- [1] Asperti, A.C., Vilhena, J.A.M., Björling problem for spacelike, zero mean curvature surfaces in \mathbb{L}^4 , J.Geom. Phys. 56, 196–213 (2006).
- [2] Kaya, S., Lopez, R., Spacelike zero mean curvature surfaces in \mathbb{L}^4 , Bull. Malays. Math. Sci. Soc. 43, 2479–2492 (2020).