

## On classification of bi-null curves in $\mathbb{R}_3^6$

---

ALI UÇUM

*Department of Mathematics, Faculty of Sciences and Arts,  
Kırıkkale University, Kırıkkale, Turkey*

aliucum05@gmail.com

In [1], the author introduced a new type of null curves called "bi-null curves" in  $\mathbb{R}_2^n$ . In this paper, we give the notion of bi-null curves in  $\mathbb{R}_3^6$ . In addition, we define osculating, normal and rectifying bi-null curve and also we give the necessary and sufficient conditions for bi-null curves in  $\mathbb{R}_3^6$  to be osculating, normal or rectifying curves in terms of their curvature functions.

### REFERENCES

- [1] M. Sakaki, *Bi-null Cartan curves in semi-Euclidean spaces of index 2*, Beitr. Algebra Geom., 53 (2012), no. 2, 421–436.
- [2] K. İlarşlan and E. Nesovic, *Some characterizations of null, pseudo null and partially null rectifying curves in Minkowski space-time*, Taiwanese J. Math. 12 (2008), no. 5, 1035–1044.
- [3] K. İlarşlan, E. Nesovic, *The first kind and second kind osculating curves in Minkowski space-time*, Compt. rend. Acad. Bulg. Sci., 62(6) (2009), 677-686.
- [4] K. İlarşlan, E. Nesovic, *Some relations between normal and rectifying curves in Minkowski space-time*, Int. Electron. J. Geom. 7 (2014), no. 1, 26-35.