# SOME CHARACTERIZATIONS OF PSEUDO

# NULL CURVES IN $\mathbb{R}_2^4$

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## Abstract

In this paper, we study with Frenet equations which are given in [M. Petrovic-Torgasev, K. İlarslan and E. Nesovic, On partially null and pseudo null curves in the Semi-Euclidean space $\mathbb{R}_2^4$, J. Geom. 84 (2005), 106-116] of a pseudo null unit speed curve in semi-Euclidean 4-space $\mathbb{R}_2^4$ with index 2. We obtain that the image of the curve lies on the pseudohyperbolic space $\mathbb{H}_1^3$ in $\mathbb{R}_2^4$. Finally, we give some characterizations in terms of harmonic curvatures of this curve in $\mathbb{R}_2^4$ and also obtain some examples.

**Keywords and phrases:** semi-euclidean space $\mathbb{R}_2^4$, pseudo null curve, pseudohyperbolic space.