CIRCULAR TRACTRICES AND CIRCULAR DINI SURFACES IN SEMI-EUCLIDEAN SPACES

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We introduce semi-Euclidean analogues of circular Dini surfaces in $\mathbb{E}^4$ which generalize the classical Dini surfaces in $\mathbb{E}^3$ by inheriting their geometric features concerning the degeneration of the Bianchi-Bäcklund transformation. The construction is based on the use of semi-Euclidean analogues of circular tractrices in $\mathbb{E}^3$.

MSC: 53A04, 53A07, 53A35, 58J72
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1. Introduction

In 2000 Yu. Aminov and A. Sym settled the problem whether the classical theory of Bianchi-Bäcklund transformations of two-dimensional pseudo-spherical surfaces