

NEW PARAMETRIC REPRESENTATION OF A SURFACE FAMILY  
WITH COMMON SMARANDACHE ASYMPTOTIC BY USING  
BISHOP FRAME

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## Abstract

In this paper, we study common smarandache asymptotic curves on a surface in the Euclidean 3-space. By utilizing the Bishop frame, the surface family can be expressed as a linear combination of the components of the local frame in Euclidean 3-space. With this parametric representation, we derive the necessary and sufficient condition for the given smarandache curve to be the common asymptotic curve on the surface.

**Keywords:** Asymptotic Curve, Bishop frame, Smarandache Curve.

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