

Constant angle surfaces in 3-manifolds

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Abstract

This poster contains selected results in the study of constant angle surfaces. A surface for which its unit normal makes constant angle with a "fixed" direction is called a *constant angle surface*. In the case of surfaces isometrically immersed in product spaces of type $\mathbb{M}^2 \times \mathbb{R}$, the fixed direction was chosen to be *the real axis* \mathbb{R} . Analogously, we classify the constant angle surfaces in Lorentzian product spaces $\mathbb{M}^2 \times \mathbb{R}_1$. Then, if the "fixed" direction is given by *the position vector*, classification results were obtained for surfaces in Euclidean and Minkowski 3-spaces. Another preferred direction may be given by a *Killing vector field*. We classify the surfaces making constant angle with a Killing vector field in the Euclidean 3-space.

References:

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