GAUSS MAPS OF THE SURFACES IN THE THREE-DIMENSIONAL HEISENBERG GROUP

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Abstract. In this paper we study the Gauss map of surfaces in three-dimensional Heisenberg group using the Gans model of the hyperbolic plane. We establish a relationship between the tension fields of the Gauss maps and the mean curvatures of the surfaces in $\mathcal{H}_3$.

MSC: 53A10; 53A35
Keywords: Gauss map, Heisenberg group, mean curvature, tension field

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