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On Minimal Hypersurfaces of Hyperbolic Space H^4 with Zero Gauss-Kronecker Curvature

Abstract: We determine minimal hypersurfaces of the hyperbolic space $H^4(-1)$ with identically zero Gauss-Kronecker curvature. Such a hypersurface is the image of a subbundle spanned by a timelike vector field of the normal bundle of a totally geodesic surface of the de Sitter space $S_1^4(1)$ under the normal exponential map. We also construct some examples.