

ABSTRACT. In this paper, we prove the existence of an isometric embedding near the origin in \mathbf{R}^3 of a two-dimensional metric with nonpositive Gaussian curvature. The Gaussian curvature can be allowed to be highly degenerate near the origin. Through the Gauss-Codazzi equations, the embedding problem is reduced to a 2×2 system of the first order derivatives and is solved via the method of Nash-Moser-Hörmander iterative scheme.