

# **COMPARISON OF NUMERICAL TECHNIQUES FOR EUCLIDEAN CURVATURE**

DEREK DALLE

**ABSTRACT.** This paper begins with a comparison of second-order numerical approximations to Euclidean curvature, and verifies that some of the approximations are invariant to Euclidean transformations. Also, higher-order Euclidean invariant numerical techniques are developed and tested. Consideration is given to strengths and weaknesses of each algorithm.