1054-53-219   **Gregory R. Kallo*** (`kallo@math.ucla.edu`). *Local Isometric Embedding in Low Codimensions.* Preliminary report.

Explicit intrinsic necessary and generically sufficient conditions will be given and proved for the existence of low-codimension local isometric embeddings of Riemannian manifolds into Euclidean spaces. These conditions have the form of equations, inequalities, and inequations on the components of the Riemann curvature tensor at each point. These results extend classical results of T.Y.Thomas and C. Allendoerfer for codimension 1. (Received September 14, 2009)