1014-53-289   **Lina Wu*** (`lina.Wu-2@ou.edu`), The University of Oklahoma, Department of Mathematics, 601 Elm Avenue, PHSC 423, Norman, OK 73019-3103. *Nonexistence of stable manifolds in an ellipsoid.* Preliminary report.

We will consider how the geometry of a Riemannian manifold M effects the existence, or more importantly the nonexistence, of the stable submanifolds in M. In particular, we will give conditions on the second fundamental form of an immersed manifold M of a Euclidean space which implies that M supports no stable submanifolds. First, we talk about the above problem in a general manifold. Second, we restrict it to an ellipsoid. (Received September 06, 2005)