1016-53-244 **Sema Salur*** (salur@math.northwestern.edu), Department of Mathematics, Northwestern University, Evanston, IL 60208. *Calibrated Geometries.*

Calibrated submanifolds are distinguished classes of minimal submanifolds and their moduli spaces are expected to play an important role in geometry, low dimensional topology and theoretical physics. Examples of these submanifolds are special Lagrangian 3-folds for Calabi-Yau, associative 3-folds and coassociative 4-folds for G2, and Cayley 4-folds for Spin(7) manifolds. In this talk we give a survey of recent research on the deformation theory of (non)compact calibrated submanifolds inside Ricci-flat manifolds. (Received February 13, 2006)