1024-53-10 **Rodrigo R Montes*** (ristow@math.wustl.edu), 7020, Dartmouth Av., Universitycity, Saint Louis, MO 63130. Invariant for Minimal Surfaces in S³.

In this talk we will introduce a new geometric invariant in order to study immersed surfaces in S^3 . This invariant (the contact angle) measures the angle between the contact distribution and the tangent space of the surface. Using this invariant we will deduce Gauss-Codazzi equations for a minimal surface in S^3 , and proof that the Clifford torus is the only minimal surface in S^3 with constant contact angle. (Received October 19, 2006)