1023-53-330 Rodrigo Ristow Montes* (ristow@math.wustl.edu), 7020, Dartmouth Av., University City, St Louis, MO 63130. A Family of Minimal Tori in the Sphere S⁵.

In this talk we will introduce the notions of contact angle and of holomorphic angle for immersed surfaces in odd dimensional spheres. We will deduce formulas for the Laplacian and for the Gaussian curvature, and we will classify minimal surfaces in S^5 with the two angles constant. This classification gives a 2-parameter family of minimal tori of S^5 . Also, we will give an alternative proof of the classification of minimal Legendrian surfaces of S^5 with constant Gaussian curvature. (Received September 06, 2006)