

1064-53-20

**Oscar M Perdomo\*** (perdomoosm@ccsu.edu). *Hypersurfaces of Space forms with constant  $m^{\text{th}}$  curvature.*

In this talk we explain the construction of all hypersurfaces with two principal curvatures and with constant  $m^{\text{th}}$ -curvature in Spheres, Hyperbolic spaces, Euclidean spaces, Minkowski spaces, Anti de Sitter spaces, de Sitter spaces and in general in any semi-riemannian space form. This construction allows us to decide when the hypersurface is embedded and when it admits the cyclic group  $Z_k$  in their group of isometries, it also allows us to decide, for any positive integer  $k$ , what values  $H_m$  can be achieved as the  $m^{\text{th}}$ -curvature of a hypersurface with two principal curvature that contains the group  $Z_k$  in its group of isometries. (Received August 02, 2010)