

1104-53-303

**Shihshu Walter Wei\*** ([wwei@ou.edu](mailto:wwei@ou.edu)), Department of Mathematics, The University of Oklahoma, Norman, OK 73072. *Geometric inequalities and the topology of noncompact submanifolds.*

We'll discuss a number of geometric inequalities on manifolds that are influenced by curvature. Their applications in physics and  $p$ -harmonic geometry will be studied. Some links of these geometric inequalities to the topology of noncompact stable minimal hypersurfaces in Riemannian manifolds will also be explored. (Received September 03, 2014)