Abstract Submitted for the TSF07 Meeting of The American Physical Society

Untangling the M Cloud Within the Local Supercluster MIKE FANELLI, Texas Chrisitan University, LINDSAY ANDERSON, University of North Dakota — The Local Supercluster (LSC) contains a number of galaxy groups with varying morphological content. Untangling the three dimensional structure of the LSC requires accurate distance measures to in individual galaxies. Distance assessments are greatly complicated by the effects of the Virgo Cluster, the dynamical center of the LSC, which perturbs the Hubble flow, introducing uncertainties in distance estimates. Discerning the content of the Virgo Cluster itself is affected; background galaxies projected onto the cluster cannot easily be distinguished from cluster members. We have analyzed the content of the M cloud, a galaxy group located on the periphery of the Virgo Cluster, using new data from the Sloan Survey and modern distance estimators. The M Cloud contains  $\sim$ 30 galaxies, located at approximately twice the distance to Virgo.

Mike Fanelli Texas Christian University

Date submitted: 05 Oct 2007

Electronic form version 1.4