Meeting: 1003, Atlanta, Georgia, SS 33A, AMS Special Session on Topics in Geometric Function Theory, I

1003-30-580 Susan G Staples\* (s.staples@tcu.edu), TCU Box 298900, Department of Mathematics, Fort Worth, TX 76129. L<sup>p</sup>-Averaging Domains in Homogeneous Spaces.

We define  $L^p$ -Averaging domains in spaces of homogeneous type endowed with an intrinsic metric. We characterize these domains in terms of the quasihyperbolic metric and prove that Boman chain domains are  $L^p$ -Averaging. (Received September 23, 2004)