Meeting: 1004, Bowling Green, Kentucky, SS 14A, Special Session on Geometric Topology and Group Theory

1004-57-200 Nikolay Brodskiy\* (brodskiy@math.utk.edu), Department of Mathematics, 121 Ayres Hall, Knoxville, TN 37996-1300. Local homotopy properties of boundaries of CAT(0) complexes. Preliminary report.

Let X be a locally finite CAT(0) polyhedral complex of constant curvature. It has a compact boundary  $\partial X$  with the "cone topology" (for a base point  $p \in X$  one can regard  $\partial X$  endowed with the compact-open topology). We provide conditions on X implying local connectivity properties of  $\partial X$ . (Received January 24, 2005)