962-20-1389   **Kim E Ruane*** (`kim.ruane@tufts.edu`), Kim Ruane, Tufts University Mathematics Dept., 213 Bromfield-Pearson Bldg., Medford, MA 02155, and **Mike Mihalik** (`mihalik@math.vanderbilt.edu`). *Why do certain CAT(0) groups have unique boundary?* Preliminary report.

In this talk I will discuss recent results concerning the topology of the boundary of a CAT(0) space which admits a geometric group action. In particular, I will give examples of CAT(0) groups which have unique boundary (i.e. any two CAT(0) spaces on which a given group acts have homeomorphic geometric boundaries). C.Croke and B.Kleiner gave examples of CAT(0) groups which do NOT have unique boundary in this sense. The main examples will be right-angled Coxeter groups. Most of the results are joint with M. Mihalik and all of these questions arose from an ongoing collaboration with M. Mihalik and S. Tschantz concerning Coxeter groups and the CAT(0) spaces on which they act. (Received October 03, 2000)