1009-20-204Kim E. Ruane* (kim.ruane@tufts.edu), Mathematics Department, Bromfield-Pearson
Building, Medford, MA 02155. Groups with specified boundary.

In this talk, we will explore the following question:

Suppose G acts geometrically on a CAT(0) space X. If the homeomorphism types of the visual boundary of X is known, what can you say about the space X and the group G. For example, if the boundary is homeomorphic to a circle, then X must be either the Euclidean plane in which case G is a Bieberbach group or X is the hyperbolic plane and G is fuchsian. (Received August 16, 2005)