1011-20-268 Mark Sapir^{*}, Dept. of Mathematics, Vanderbilt University, Nashville, TN 37240. Groups acting on tree-graded spaces. Preliminary report.

This is a joint work with Cornelia Drutu. We develop a theory of groups acting on tree-graded spaces similar to Rips-Bestvina-Feign theory of groups acting on R-trees. Applications include, in particular, new results about relatively hyperbolic groups. (Received August 29, 2005)