Richard M. Green* (rmg@euclid.colorado.edu), Department of Mathematics, University of Colorado Boulder, Campus Box 395, Boulder, CO 80309-0395, and Tianyuan Xu (tianyuan.xu@colorado.edu), Department of Mathematics, University of Colorado Boulder, Campus Box 395, Boulder, CO 80309-0395. Some finite dimensional representations of $Y$-groups. Preliminary report.

A Coxeter group is called a $Y$-group if its Coxeter diagram $Y_{pqr}$ consists of a central node connected to three branches of lengths $p$, $q$, and $r$. Although $Y$-groups are generally infinite, they have many interesting finite quotients. We will discuss some representations of $Y$-groups that arise from finite Kazhdan–Lusztig cells in the case where $p = 1$ but $q$ and $r$ are arbitrary. (Received August 21, 2019)