

1059-20-188

**Noel P Brady\*** (nbrady@math.ou.edu), Department of Mathematics, University of Oklahoma, Norman, OK 73019, and **Dan Guralnik** and **Sang Rae Lee**. *Dehn functions and finiteness properties of subgroups of CAT(0) groups.*

We describe a generalization of right angled Artin groups which use a doubling trick due to Bieri. These provide examples of CAT(0) groups which contain finitely presented subgroups which are not of type  $FP_3$ . The Dehn functions of these subgroups are polynomial of degree  $n \geq 4$  or exponential. (Received February 23, 2010)