

1023-20-1778

Patrick Bahls* (pbahls@unca.edu), UNCA Department of Mathematics, CPO #2350, One University Heights, Asheville, NC 28804-8511. *On growth series of Coxeter groups.*

Motivated by the graph theoretic notion of asymptotic connectivity, we investigate the growth of various classes of Coxeter groups, obtaining refinements of the growth series $W(x)$ for certain groups W . In the context of right-angled Coxeter groups, we compute the number of geodesic elements of a given length which can end with any one of a prescribed set of generators, recovering a well-known result on the growth series $W(x)$ as a corollary. (Received September 26, 2006)