1116-20-576 **Kristen Pueschel*** (kpueschel@math.cornell.edu) and **Timothy Riley**. *Dehn functions of mapping tori of rank-3 right-angled Artin group automorphisms.*

The Dehn function of a finitely presented group G is at once both an algebraic and a geometric invariant. Algebraically, the Dehn function gives an upperbound on the time complexity of solving the word problem in G. Geometrically, it describes isoperimetry, the minimal area of discs spanning loops in a group's Cayley 2-complex as a function of perimeter length. In this talk, I will motivate and discuss a classification for the Dehn functions of groups of the form $G \rtimes_\phi \mathbb{Z}$, where G is a rank-3 right angled Artin group. (Received September 07, 2015)