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**Kassie Archer\*** ([kassie.r.archer.gr@dartmouth.edu](mailto:kassie.r.archer.gr@dartmouth.edu)), 6188 Kemeny Hall, Hanover, NH  
03755. *Descents of  $\lambda$ -unimodal cyclic permutations.*

Let  $\lambda = (\lambda_1, \dots, \lambda_k)$  be a composition of  $n$ . A  $\lambda$ -unimodal permutation  $\pi$  is a concatenation of  $k$  unimodal segments of lengths  $\lambda_i$  for all  $1 \leq i \leq k$ . For example,  $\pi = 149652387$  is a  $(6, 3)$ -unimodal permutation because it is concatenation of a unimodal segments 149652 and 387.

I will present an identity conjectured by Roichman and Adin about the descent set of  $\lambda$ -unimodal cycles, the proof of which involves a relationship between these permutations and words. Additionally, I will discuss some consequences of the identity from representation theory. (Received August 16, 2013)