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Thomas Lam* (tfylam@umich.edu), 555 E William St. #24D, Ann Arbor, MI 48104. *The shape of a random affine Weyl group element, and random core partitions.*

Let W be an affine Weyl group. I will discuss probabilistic aspects of infinite reduced words of W , which are equivalent to walks in the alcoves of the affine Coxeter arrangement not crossing any hyperplane twice. I will show that such walks almost surely have one of finitely many asymptotic directions, and also discuss how this direction, and the probabilities of each direction can be calculated. I will also briefly explain how these results fit in the context of the theory of random partitions. (Received September 10, 2011)