1104-05-174 **Carla D Savage*** (savage@ncsu.edu), Department of Computer Science, Box 8206, North Carolina State University, Raleigh, NC 27695. *Inflated Eulerian Polynomials.* Preliminary report.

For a sequence $s = (s_1, \ldots, s_n)$ of positive integers, an *s-inversion sequence* is an integer sequence $e = (e_1, \ldots, e_n)$ where $0 \leq e_i < s_i$. An *ascent* in e is an index i, $0 < i < n$, such that $e_i/s_i < e_{i+1}/s_i$. If $e_1 > 0$ then 0 is also an ascent.

The *s-Eulerian polynomials* are the ascent polynomials of s-inversion sequences. They are related through Ehrhart theory to *s-lecture hall partitions*. They generalize descent polynomials of Coxeter groups of type A and B. It has been shown that the s-Eulerian polynomials are all real-rooted.

In contrast, the *inflated s-Eulerian polynomials* weight an s-inversion sequence by its last entry as well as its ascent number. In this talk we review recent results about inflated Eulerian polynomials and Gorenstein lecture hall cones; we establish some new properties of inflated Eulerian polynomials; and we find relationships to polynomials arising in the study of the maxdrop statistic on permutations. (Received August 31, 2014)