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)