1146-14-333 Sergio Da Silva* (sergio.dasilva@umanitoba.ca). Understanding the blow-up of a subword complex along its boundary.

A subword complex is a simplicial complex that describes the structure of the set of reduced subwords of a Weyl group element. They appear in the problem of finding a Gorensteinization for Schubert varieties, where it is known that the blow-up of a Schubert variety along its boundary divisor is Gorenstein. This can be done by using local equations (called Kazhdan-Lusztig equations) to reduce the problem to the affine case. These affine varieties can be degenerated to a toric scheme defined using the Stanley-Reisner ideal of a subword complex. The blow-up of the Kazhdan-Lusztig variety degenerates to the blow-up of a Stanley-Reisner scheme along its boundary. I will provide a combinatorial description for the blow-up of a subword complex which characterizes the exceptional components in terms of specific reduced words. (Received January 25, 2019)