Realizing subword complexes via triangulations of root polytopes.

Subword complexes are simplicial complexes introduced by Knutson and Miller to illustrate the combinatorics of Schubert polynomials and determinantal ideals. They proved that any subword complex is homeomorphic to a ball or a sphere and asked about their geometric realizations. We show that a family of subword complexes can be realized geometrically via triangulations of root polytopes. Based on joint work with Karola Mészáros. (Received January 19, 2015)