1116-05-755 **Laura Escobar*** (lescobar@illinois.edu), Department of Mathematics, University of Illinois at Urbana-Champaign, 1409 W. Green Street, Urbana, IL 61801, and **Karola Meszaros**. *Toric matrix Schubert varieties.*

Given a matrix Schubert variety X_π, it can be written as $X_\pi = Y_\pi \times \mathbb{C}^q$ (where q is maximal possible). We characterize when Y_π is toric (with respect to a $(\mathbb{C}^*)^{2n-1}$-action) and study the associated polytope of its projectivization. We construct regular triangulations of this polytope which we show are geometric realizations of a family of subword complexes. Subword complexes were introduced by Knutson and Miller, who also showed that they are homeomorphic to balls or spheres and raised the question of their polytopal realizations. Based on joint work with Karola Meszaros. (Received September 11, 2015)