

1135-05-1747      **Laura Escobar\***, DEPARTMENT OF MATHEMATICS, 273 Altgeld Hall, 1409 W. Green Street, Urbana, IL 61801. *Bott-Samelson varieties and combinatorics.*

In the 1970's Hansen and Demazure independently constructed resolutions of singularities for Schubert varieties: the Bott-Samelson varieties. In this talk I will describe their relation with associahedra. I will also discuss joint work with Pechenick-Tenner-Yong linking Magyar's construction of these varieties as configuration spaces with Elnitsky's rhombic tilings. Finally, based on joint work with Wyser-Yong, I will give a parallel for the Barbasch-Evens desingularizations of certain families of linear spaces which are constructed using symmetric subgroups of the general linear group. (Received September 24, 2017)