

# **SCHUBERT VARIETIES AND TORIC VARIETIES**

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Degeneration of Schubert varieties to toric varieties is completed in the paper “Toric degeneration of Schubert varieties” by Philippe Caldero. In an attempt to find a geometric proof of this result we realized that certain Schubert varieties are already toric varieties: A Schubert variety  $X_w$  is a toric variety if and only if  $w$  is a product of distinct simple reflections. Part of this result can be found (not explicitly mentioned) in Deodhar’s article “On some geometric aspects of Bruhat orderings. I. A finer decomposition of Bruhat cell.” The author was unaware of this fact while writing his article. In  $A_n$  type, Masuda and Lee have different approach to get this result in their recent paper “Generic torus orbit closure in Schubert varieties.” In this talk we give an overview of this topic.

Talk will take place in Pearce 226 on

**FRIDAY, 10/12/2018, 11:15AM–12:15PM**

*Hope to see you there!*