William Graham and Wenjing Li*, wliwmath@gmail.com. The Smooth Locus of Spiral Schubert Varieties of type $\tilde{A}_2$.

One interesting problem in the study of Schubert varieties is to determine the set of points where the Schubert variety is smooth. We describe the smooth locus of an interesting family of Schubert varieties called spiral Schubert varieties in the case of affine $A_2$. We do this by using some root system facts, to calculate equivariant multiplicities of spiral Schubert varieties at certain rationally smooth points. (Received August 05, 2014)