

1155-05-494

Allen Knutson* (allenk@math.cornell.edu) and **Paul Zinn-Justin**. *Puzzles for Segre-Schwarz-MacPherson Schubert calculus.*

The Białynicki-Birula strata $BwT/T \subseteq G/T$ (G complex) are much simpler than those on G/B (the Bruhat cells). To relate them to actual Bruhat cells we follow them under the Grothendieck-Springer degeneration of G/T to $T^*(G/B)$, obtaining Maulik-Okounkov's "stable basis", then formally divide them by the class of the zero section to get *Segre-Schwarz-MacPherson classes*. I will give a rule, joint with Paul Zinn-Justin, for multiplying these classes (on T^* of up to 4-step flag manifolds) using a new formulation of puzzles, closer to pipe dreams. This T^*G/P rule implies the G/P rule up to 3-step, and also lets one compute the Euler characteristic of **positive-dimensional** (transverse) intersections of Bruhat cells. (Received January 20, 2020)