1108-14-389 Alexander Woo, Benjamin Wyser* (bwyser@illinois.edu) and Alexander Yong. Interval pattern avoidance and singularities of symmetric orbit closures in the flag variety. Preliminary report.

We define interval pattern avoidance for combinatorial parameters of K-orbit closures on the flag variety G/B for the pair $(G, K) = (GL_n, GL_p \times GL_{n-p})$. We discuss how this combinatorial notion governs certain local properties of the orbit closures, including smoothness, lci-ness, and Gorensteinness. The key geometric result is an isomorphism between certain "attractive slices" of orbit closures. (Received January 19, 2015)