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Alexander Woo (awoo@uidaho.edu), **Benjamin Wyser** (bwyser@illinois.edu) and **Alexander Yong*** (ayong@uiuc.edu). *Combinatorics and geometry of symmetric orbit closures*. Preliminary report.

The geometry of symmetric orbit closures in the flag variety arises in the representation theory of the real forms of complex semisimple (reductive) Lie groups. In the case of the symmetric pairs (GL_n, K) , Benjamin Wyser and the speaker have described analogues of the Schubert polynomials. I'll explain this work, as well as an ongoing project with Alexander Woo and Benjamin Wyser to understand the singularities of the orbit closures via combinatorics. (Received September 04, 2014)