

1007-05-221

Caroline Klivans* (cjk@math.uchicago.edu). *The Bergman Complex of a Matroid.*

We associate to any matroid M a polyhedral complex $B(M)$, called the Bergman complex. If M is an oriented matroid, $B(M)$ also has a natural "positive part" $B_+(M)$. Bergman complexes arise in tropical geometry and somewhat surprisingly as the space of phylogenetic trees. I will talk about the combinatorics and topology of these complexes.

This is joint work with Federico Ardila and Lauren Williams. (Received February 22, 2005)