Caroline Klivans (Cornell)

The Bergman Complex of a Matroid and Phylogenetic Trees

Abstract for the Combinatorics Seminar 2004 March 5

I will talk about the Bergman complex B(M) of a matroid M: a polyhedral complex which arises in algebraic geometry, but which we describe purely combinatorially. We prove that a natural subdivision of the Bergman complex of M is a geometric realization of the order complex of its lattice of flats. In addition, we show that the Bergman fan $B'(K_n)$ of the graphical matroid of the complete graph K_n is homeomorphic to the space of phylogenetic trees T_n .

This is joint work with Federico Ardila.

From:
http://www2.math.binghamton.edu/ - **Department of Mathematics and Statistics, Binghamton University**

Permanent link:
http://www2.math.binghamton.edu/p/seminars/comb/abstract.200403kli

Last update: **2020/01/29 19:03**