

Alex Fink (North Carolina State)

Matroids Over Rings

Abstract for the Combinatorics Seminar 2013 April 22

(Joint with the Algebra Seminar)

Matroids are widely used objects in combinatorics, arising naturally in many situations featuring vector configurations over a field. But in some contexts the natural data are objects in a module over a ring, and there is more than simply a matroid to be extracted. Luca Moci and I have defined the notion of matroid over a ring to fill this niche. I will discuss two examples of situations producing these enriched objects, one relating to subtorus arrangements producing matroids over the integers, and one related to tropical geometry producing matroids over a valuation ring.

Time permitting, I'll also discuss the analogue of the Tutte invariant.

From:

<http://www2.math.binghamton.edu/> - **Binghamton University Department of Mathematical Sciences**

Permanent link:

<http://www2.math.binghamton.edu/p/seminars/comb/abstract.201304fin>

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

