

# Combinatorics Seminar

Wednesday February 4th, 2015

3:00-3:50 pm in Hume 331

## Clones in Matroids

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### **ABSTRACT**

Two elements are clones in a matroid if the map that interchanges the two elements and fixes all other elements is an isomorphism. The cardinality of a clone set in a matroid is related to the representability of the matroid. Some results on the maximum size of a clone set in a sufficiently connected matroid that is representable over a finite field are given. Connections between these results and fundamental conjectures in projective geometry are given.

This work is joint with Adam Gray, Jakayla Robbins, and Joe Zhou.