1151-05-35  Spencer Backman, Christopher Eur* (chrisweur@berkeley.edu) and Connor Simpson.

Simplicial generation of Chow rings of matroids.

We introduce a new presentation of the Chow ring of a matroid whose variables now admit a combinatorial interpretation via the theory of matroid quotients and display a geometric behavior analogous to that of nef classes on smooth projective varieties. We discuss various applications, including the recovery of the combinatorially relevant portion of the Hodge theory of matroids developed by Adiprasito, Huh, and Katz. (Received July 26, 2019)