1128-13-324Thomas McKenzie* (mckenzie@gonzaga.edu), 502 East Boone Avenue, Gonzaga University,
Department of Mathematics, Spokane, WA 99258. A Graph of Separable Polynomials.

Assume R is a commutative ring with identity. A monic polynomial with coefficients in R is said to be separable if it is relatively prime to its formal derivative. We form a graph of separable polynomials and we consider the simplicial complex formed by the cliques of this graph. In the case where R has exactly one maximal ideal, we show that the set of separable polynomials forms a matroid. (Received February 28, 2017)