
SASHA PEVZNER, Northeastern University

Fixed quotients of polynomial rings and Stanley–Reisner rings

Given a finite group action on a ring, the fixed quotient is a natural module over the ring of invariants. We will first discuss this module structure for the symmetric group with its usual action on the polynomial ring, focusing on homological results and patterns. We will then investigate the fixed quotient of a certain Stanley–Reisner ring, also carrying a symmetric group action, which is related to the polynomial ring via Groebner degeneration. This suggests a framework for relating the study of the Stanley–Reisner fixed quotient to that of the polynomial ring.