1023-05-9   **Victor S. Reiner*** (`reiner@math.umn.edu`), School of Mathematics, University of Minnesota, Minneapolis, MN 55455. *New combinatorics from the invariant theory of reflection groups.*

Invariant theory of reflection groups has been a rich source of combinatorics in the past. This talk will first discuss what one might mean by "reflection group", and then discuss two more recent combinatorial developments influenced by the invariant theory of reflection groups: Cyclic sieving phenomena and the Catalan combinatorics of reflection groups. (Received July 13, 2006)