1086-14-2852   **Julianna Tymoczko*** (`jtymoczko@smith.edu`), Clark Science Center, Smith College, Northampton, MA 01063. *Springer varieties, Hessenberg varieties, and poset pinball.*

We discuss poset pinball, a combinatorial method for computing the (equivariant) cohomology of certain algebraic varieties. Poset pinball can be applied to varieties like Springer varieties and Hessenberg varieties, whose cohomology often carries interesting representations. We describe what is known about these representations, as well as what is conjectured. (Received September 25, 2012)