## 1165-05-306 **Julianna Tymoczko\*** (jtymoczko@smith.edu), Department of Mathematics, Smith College, Northampton, MA 01060. *Hessenberg Schubert polynomials.*

We describe a set of polynomials that generalize Schubert polynomials. Geometrically, these polynomials are connected to Hessenberg varieties: a family of subvarieties of the full flag variety defined by the choice of a linear operator X and a nondecreasing function  $h : \{1, 2, ..., n\} \rightarrow \{1, 2, ..., n\}$ . Hessenberg varieties can be paved by an appropriate choice of Schubert cells, inducing an additive "Hessenberg Schubert basis" in the homology of each Hessenberg variety. We give open questions as well as some results. This is joint work with Harada, Horiguchi, Murai, and Precup. (Received January 19, 2021)