Andrew W. Snowden*, asnowden@umich.edu. *Two tales from equivariant commutative algebra.

Suppose that a group $G$ acts on a commutative ring $R$. One can then formulate equivariant analogs of many basic concepts from commutative algebra: for example, one has a notion of $G$-prime ideal, or the $G$-spectrum of $R$. I will explain a little about the general set-up, and then discuss two results: the first describes $\text{GL}_\infty$-prime ideals using supergeometry; the second (joint with Rohit Nagpal) classifies the $\mathfrak{S}_\infty$-prime ideals in the infinite variable polynomial ring. (Received February 03, 2020)