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Alexandra Seceleanu* (aseceleanu@unl.edu) and **Brian Harbourne**. *Regular versus symbolic powers for ideals of points in positive characteristic.*

When I is the radical homogeneous ideal of a finite set of points in projective N -space, it has been conjectured by Harbourne and Huneke that the symbolic power $I^{(rN-N+1)}$ should be contained in the regular power I^r for all $r \geq 1$. A counterexample of Dumnicki, Szemberg and Tutaj-Gasinska shows that this can fail when $N = r = 2$. In this talk, we show that failures occur for infinitely many r in every characteristic $p > 2$ when $N = 2$, and we find additional positive characteristic failures when $N > 2$. (Received September 15, 2013)