Nate Harman* (nharman@mit.edu). *Periodicity phenomena in the modular representation theory of symmetric and general linear groups.

In characteristic zero there are a number of representation theoretic quantities for symmetric groups $S_n$ and general linear groups $GL_n$ which stabilize in an appropriate sense as $n$ tends to infinity. We investigate what happens to these when we pass to the positive characteristic and quantum cases. In positive characteristic we have a notion categorical periodicity which is actually stronger than what happens in characteristic zero, but the periods involved are unbounded. In the quantum case we get a weaker numerical periodicity similar to the semisimple case, but with bounded period. (Received September 21, 2015)