1116-20-2126   **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)