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**Adam D Towsley\*** (adtsma@rit.edu), 59 Cheswell Way, Brighton, NY 14610. *Randomness in mod  $p$  orbits.*

Let  $\varphi(x) = x^3 + c$  and  $S$  be the set of primes which are 2 mod 3. Consider a prime  $p \in S$ , the polynomial  $\varphi$  induces a permutation of  $\mathbb{F}_p$ . If we allow  $p$  to vary in  $S$  the permutation of  $\mathbb{F}_p$  induced by  $\varphi(x)$  seems to exhibit random behavior. We present several properties, along with supporting data, that would be observed if the induced permutations change randomly. (Received February 19, 2018)