## 1154-11-499 Emerald T Stacy\* (estacy2@washcoll.edu), 300 Washington Ave, Chestertown, MD 21620, and Ozlem Ejder, Jaime Juul and Borys Kadets. Periodic Points of Polynomials in Finite Fields.

Let  $\mathcal{F}(d,q)$  denote the set of monic, degree d, polynomials over the finite field  $\mathbb{F}_q$ . For  $f \in \mathcal{F}(d,q)$ , let  $\operatorname{Per}(f)$  denote the number of periodic points of f over  $\mathbb{F}_q$ . Fixing d, as  $q \to \infty$ , what happens to the average number of periodic points under each function in  $\mathcal{F}(d,q)$ ? In this talk, we will explore a heuristic to estimate this average, and compare the heuristic to data collected for some d and q. (Received September 05, 2019)