1116-15-2416   **Gregory Taylor*** (`gktaylor@email.wm.edu`), 4634 Brook Highland Lane, Tuscaloosa, AL 35406, and **Chi-Kwong Li** and **Diane Pelejo**. *Polynomial Functions Over $\mathbb{Z}_n$.*

Polynomials play an important role in the theory of functions. It is known that all functions over a finite field can be written as a polynomial with entries from the field. In this talk, we study the case of polynomial functions over the ring of integers modulo some composite integer n. We take a matrix theoretic approach to establish results regarding the number of polynomial functions and determining whether a function can be represented as a polynomial. Computational techniques are emphasized in order to deliver meaningful calculations based on the theoretical results. (Received September 22, 2015)