

1035-G1-1961      **Ahlam E Tannouri\*** (atannour@jewel.morgan.edu), Morgan State University, Carnegie Building, Mathematics Department, 1700 E. Cold Spring, Baltimore, MD 21251, and **Sam F Tannouri** (stannour@jewel.morgan.edu), Morgan State University, Calloway Building, Computer Science Department, 1700 E. Cold Spring, Baltimore, MD 21251. *Applications of Galois Field to Coding Theory and Cryptology*. Preliminary report.

In the early nineteen century, Evariste Galois was the first mathematician to study the theory of finite fields. In recent years, there has been a renewed interest in this branch of modern algebra that has come to the fore front because of its important applications in such areas as information theory, coding theory and cryptology. In the first part of the talk we will present an introduction to this theory, emphasizing those aspects that are relevant for application and in the second part we will present several applications of finite fields, especially to algebraic coding theory and cryptology. (Received September 20, 2007)