1046-D1-717 **Amber M Rogers*** (Rogersa2@nku.edu), Department of Mathmatics, Northern Kentucky University, Highland Heights, KY 41099. *An Introduction to Algebraic Cryptanalysis.*

Algebraic cryptanalysis is a relatively new form of cryptanalysis which involves representing a cipher as a system of multivariate polynomial equations and using a computer to solve the system. This talk will be an introduction to the basics of algebraic cryptanalysis. An example based on the Keeloq cipher will be used to demonstrate how the polynomial system can be built. (Received September 10, 2008)