Jonathan Chaika

Title of Talk: Factorization of Congruence Monoids

Abstract:
This talk will deal with showing when Congruence Monoids i.e. a monoid in which all of the elements are congruent to a multiplicatively closed subset of Z mod nZ (with 1 thrown in). This talk will deal with when these monoids are factorial, half-factorial, and congruence half-fractorial. It will also discuss the elasticity of congruence monoids and when they are fully elastic. The particular congruence monoids being focused on for this talk will be singular and semi-regular congruence monoids, i.e. they contain elements that are not in the group of multiplicative units of Z mod nZ.