

Speaker: Nariel Monteiro

Title: The Integral and Defining-Characteristic Representations of GL_n over Finite Local Principal Ideal Rings of Length Two

Abstract: Let O and O' be two distinct finite local rings of length two with the same residue field of characteristic p . We can form the finite groups $GL_n(O)$ and $GL_n(O')$. In this talk, we will be comparing the representations of those two groups over different rings. For example, it was shown by Singla that the complex representation of those groups are the same, i.e the group algebras are isomorphic. We will give a survey of some of the results in the area and then focus on the integral and defining-characteristic representations of such groups.