



# ALGEBRA SEMINAR

## Mackey Category of Brauer Pairs

By

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**Abstract:** For a finite group  $G$ , and an algebraically closed field of char  $p$ ,  $G$  acts on  $kG$  by conjugation, making it a  $G$ -algebra. A pair  $(P, c)$  such that  $P$  is a  $p$ -subgroup of  $G$  and  $c$  is a block idempotent of  $kC_G(P)$  is called a Brauer pair. Brauer pairs form a refinement of the  $G$ -poset of  $p$ -subgroups of a finite group. In this talk, we will define the ordinary Mackey biset category  $\mathcal{C}$  of Brauer pairs (shortly, Mackey category of Brauer pairs) and if time permits, show that the category algebra of  $\mathcal{C}$  is semisimple.

**Date:** December 18, 2019 Wednesday

**Time:** 10:40 – 11:50

**Place:** SA141 Mathematics Seminar Room

\* Simit and cream cheese will be served before the talk. All are most cordially invited.