



# ALGEBRA SEMINAR

## Some new characteristic $p$ -functor and Thompson's critical subgroup

By

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**Abstract:** Let  $p$  be a prime and  $P$  be a finite  $p$ -group. We define a new characteristic subgroup  $K(P)$  of  $P$  and show that  $K(P)$  is a critical subgroup of  $P$ . Secondly, we define several new characteristic subgroups  $K^*(P)$ ,  $K_i(P)$  for each positive integer  $i$  and show that they enjoy some interesting and new properties similar to the those of critical subgroups.

**Date:** Wednesday, April 3, 2024

**Time:** 16:00

**Place:** SA 141