

ALGEBRA SEMINARS

A Generalization of The Burnside Fusion Theorem

By

Yasir Kızmaz (Bilkent)

<u>Abstract:</u> Let G be a finite group, p a prime dividing |G|, and let P be a Sylow p-subgroup of G. In this talk, we prove that if certain elements of P of order p lie in the center of P and p is odd, then N(P) controls G-fusion in P. For p=2, we reach the same conclusion with some further assumptions on P. We also prove an analogue of our result for saturated fusion systems.

Date: March 4, 2019 <u>Time:</u> 10:40 – 11:50 <u>Place:</u> SA141 Mathematics Seminar Room

* Tea and cookies will be served before the talk. All are most cordially invited.