

Hacettepe University Department of Mathematics

GENERAL SEMINAR

Çisil Karagüzel

Bilkent University Türkiye

Fusion systems of blocks of finite groups over arbitrary fields

Let G be a finite group and k be a field of characteristic p>0. Puig associated a fusion system to a block idempotent of kG and proved that this block fusion system is saturated if k-algebra $kC_G(P)e$ is split, where (P,e) denotes a maximal b-Brauer pair.

In this talk, we will investigate in the non-split case how far the fusion system is from being saturated by describing it in an explicit way as being generated by the fusion system of a related block idempotent over a larger field together with a single automorphism of the defect group. This is a joint work with Robert Boltje (UC Santa Cruz) and Deniz Yılmaz (Bilkent University).



November 30, 2022 Wednesday





Hacettepe University Dept. of Mathematics Yaşar Ataman Hall