

1094-20-233

Silvia E Onofrei* (onofrei@math.ohio-state.edu), 100 Math Tower, 231 West 18th Ave,
Columbus, OH 43210. *Saturated fusion systems with parabolic families.*

Let G be group, a finite p -subgroup S of G is a Sylow p -subgroup if every finite p -subgroup of G is conjugate to a subgroup of S . In this talk, I examine the relations between the fusion system over S which is given by conjugation in G and a certain chamber system \mathcal{C} , on which G acts chamber transitively with chamber stabilizer $N_G(S)$.

Next, I introduce the notion of a fusion system with a parabolic family and I show that a chamber system can be associated to such a fusion system. I determine some conditions the chamber system has to fulfill in order to assure the saturation of the underlying fusion system.

An application to fusion systems with parabolic families of classical type will be given. (Received August 25, 2013)