THE DEPARTMENT OF MATHEMATICS

$\mathfrak{F}_P(P) = \mathfrak{F}_P(G) \quad P \in Syl_p(G) \quad N = N_G(Z(J(P))), \mathfrak{F}_P(N) = \mathfrak{F}_P(G)$

Algebra Seminar

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Monday – February 4, 2019

at 4pm, in the Alavi Commons, Everett Tower

Organizational Meeting

Clifton E. Ealy Jr.
The Department of Mathematics
Western Michigan University

The main theme for the Spring Semester will continue to be the Local Theory of Finite Groups. Talks from representation theory would be welcomed, in concert with Professor Paul's course on Linear Representations of Groups. More generally we say a group H is a representation of the group G if there is a (non-trivial) homomorphism from G into H. Frucht proved that "any finite group could be represented as the automorphism group of a finite graph" and Phelps proved that "any finite group could be represented as the automorphism group of a (finite) perfect code". Moreover, Feit and Higman proved, via the matrix representation theory of graphs, that if G is a finite bipartite graph of diameter n and girth 2n, then n is 3, 4, 6, or 8. Talks on the aforementioned are welcomed. In addition, talks on coding theory, algebraic geometry, or applying group theory or algebra to problems in biology are also welcomed. All are welcomed.

$1 \to C \to G \to G/C \to 1 \quad P \in Syl_p(G/C) \quad 1 \to C \to G \to G/C \to 1$

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