Arnold D. Feldman
Franklin & Marshall College, Lancaster, Pennsylvania, USA
Valencia, April 2019
Analogues of pronormality in σ-solvable finite groups

Abstract

This is a preliminary talk about topics in finite groups that I am discussing with M.D. Pérez-Ramos and Rex Dark. Skiba and others have studied a generalization of solvability that they call σ-solvability, where σ is a partition of the set of prime integers. When σ is the partition in which each set contains exactly one prime, σ-solvability is just solvability. Many properties of solvable groups and their subgroups have analogues in σ-solvable groups. In this talk, we introduce two possible generalizations of pronormality, which we call σ-pronormality and weak σ-pronormality, and describe how they interact with other subgroup properties, including σ-subnormality as defined in Skiba's work.