

962-20-676

Friedrich Kluempen (fred@math.binghamton.edu), Department of Mathematical Sciences,
SUNY at Binghamton, Binghamton, NY 13902-6000. *On the Power Structure of Finite 2-groups.*

In 1934, P. Hall introduced regular p -groups. Any regular 2-group is abelian. A regular p -group is power closed, exponent closed, strongly semi- p -abelian and an exact power margin group. The study of these properties, and relationships among them, constitutes the investigation of the power structure of a p -group. In this talk, we present the classification of metacyclic 2-groups and 2-generator 2-groups of nilpotency class two according to their power structure. (Received September 20, 2000)