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Quasiprimitive Group Actions and Graph Quotients

Abstract for the Combinatorics Seminar 2011 September 20

A group G is said to act quasiprimitively on a set Ω if every nontrivial (e.g., non-identity) normal subgroup of G is transitive on Ω. I will discuss the basics of group actions, the different types of quasiprimitive actions, and the application of Cheryl Praeger's "normal quotient method" for the study of various families of graphs.

Following this talk there will be an Algebra Seminar entitled "The Locally 2-Arc Transitive Graphs Admitting an Almost Simple Group of Suzuki Type" that shows the application of ideas presented in this talk.
