

UNIVERSITY OF DELAWARE
DEPARTMENT OF MATHEMATICAL SCIENCES
DISCRETE MATHEMATICS SEMINAR

Friday Oct. 4, 2002, 3:45pm, Room 436 Ewing Hall

**Generalized quadrangles and
related combinatorial objects. I.
A positive answer on a question
of Godsil and Hensel.**

Mikhail Klin, University of Delaware

This is the first lecture in a small series devoted to the consideration of some links between generalized quadrangles and other combinatorial structures, in particular, strongly regular graphs, distance regular graphs, association schemes, and partial difference sets.

In the first part of the talk I will introduce the definitions of the above structures and will illustrate them with the aid of a few simple examples.

The second part of the talk will be devoted to the consideration of a pseudo-geometric strongly regular graph on 96 vertices, which has such spread that after its deletion we get an antipodal distance regular graph. This graph provides an answer on the question posed by Godsil-Hensel. This part is based on a joint paper with Andries Brouwer and Jack Koolen, submitted to Discrete Mathematics.