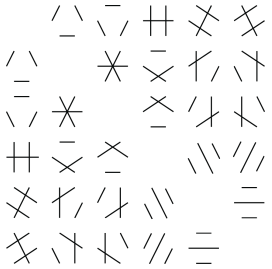
Mathematics Seminar



Rocky Mountain Algebraic Combinatorics Seminar

A formula for Steiner Triple Systems $STS(2^n - 1)$ of low 2-rank

Octavio Paez Osuna
Passaic County Community College

In this talk we present a formula for the number of distinct $STS(2^n - 1)$ of 2-rank $\leq 2^n - n + 1$. The formula is obtained using some connections between Steiner Triple Systems and associated codes with certain projective and combinatorial configurations. We show how some combinatorial configurations were enumerated using known STS and how these same configurations may be used to construct and enumerate new STS.

Krein conditions for fun and profit

Sylvia Hobart
University of Wyoming

The Krein conditions for a strongly regular graph (or more generally a distance regular graph) are inequalities based on eigenvalues, giving nonexistence conditions. Starting from basics, I will give three different proofs and discuss a new extension to directed strongly regular graphs.

Weber 223
4–6 pm
Friday, October 31, 2014
(Refreshments in Weber 117, 3:30–4 pm)
Colorado State University

This is a joint Denver U / UC Boulder / UC Denver / U of Wyoming / CSU seminar that meets biweekly.
Anyone interested is welcome to join us at a local restaurant for dinner after the talks.

Colorado State University

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