Lethbridge Number Theory and Combinatorics Seminar

Monday — March 16, 2020
Room: W561
Time: 12:00 to 12:50 p.m.

Hadi Kharaghani

University of Lethbridge

Equiangular Tight Frames; Construction and Applications

A family of lines through the origin in a Euclidean space is called equiangular if the absolute value of the inner product of each pair of lines is a constant. A $d \times n$, $d < n$ matrix F with real entries is a Frame if the absolute value of the off-diagonal entries of $F^T F$ is a constant. A $d \times n$ Frame is Tight if the rows are pairwise orthogonal and it is Flat if the absolute value of the entries stays the same. A new construction method makes use of Block Shapiro-Golay pairs. Applications lead to a class of Quasi-symmetric designs and Self-Complementary Codes attaining Grey-Rankin Bound. All concepts will be explained with simple examples.

EVERYONE IS WELCOME!

Visit the seminar web page at
http://www.cs.uleth.ca/~nathanng/ntcoseminar/

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