



Department of Mathematics and Statistics

Colloquium

Tuesday March 10

4:00 - 4:50 pm Adel 164

Equiangular tight frames

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Abstract

An equiangular tight frame (ETF) consists of vectors that form a type of optimal packing of lines in Euclidean space. Specifically, ETFs are collections of vectors whose coherence is as small as possible, equaling the Welch bound. These collections of vectors have connections to topics such as signal processing, graph theory, design theory, and coding theory. In this talk we will discuss a couple of recently developed constructions of ETFs and their connection to various areas of mathematics.

Refreshments at 3:45