

COLLOQUIUM

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Intersection Theorems for Systems of Sets and Multisets

The logo for Mathematics and Statistics features a large orange circle in the center, containing the text "Mathematics and Statistics" in a bold, black, sans-serif font. This circle is set against a background of four blue squares arranged in a 2x2 grid, with the circle overlapping the center of these squares.

Mathematics
and
Statistics

Date: October 17

Time: 3:30 - 4:30 PM

Room: RIC 209

Abstract: In 1961, Paul Erdős, Chao Ko and Richard Rado published a paper which introduced what is now known as the Erdős–Ko–Rado theorem. This theorem is a fundamental result in extremal set theory that answers the question of the size and structure of the largest collection of pairwise t -intersecting subsets of size k from a set of size n . In this talk, I will describe the evolution of the theorem from the initial results of Erdős, Ko and Rado up until 1997 when Ahlswede and Khachatrian answered the question for all values of n , k and t . I will then describe some recent work on intersection theorems for collections of multisets.