

Seminario de Grafos

Speaker: Neal Bushaw, PhD

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Title: Erdős-Ko-Rado Problems for Graphs.

Abstract: In this talk, we introduce a new line of research exploring the size and structure of the largest intersecting family of paths in a graph. A family of sets is called intersecting if every pair of its members share an element; such an intersecting family is called a star if some element is in every member of the family. Erdős-Ko-Rado famously proved (1938, 1962) that the maximum size intersecting families of r -subsets of $\{1, 2, \dots, n\}$ (with $r \leq n/2$) are precisely the stars. Here, we consider families of sets where the sets are the vertex sets of paths in a fixed graph. We prove Erdős-Ko-Rado type structural results for families of r -paths in a graph G , for several infinite classes of graphs G . This is joint work with James Danielsson and Glenn Hurlbert.

Friday 6th, 10:00 at room John Von Neumann.

