VCU Discrete Mathematics Seminar

The Erdos-Ko-Rado Theorem and Generalizations on Graphs

Prof Glenn Hurlbert
VCU!

Wednesday, Oct. 13
12:30–1:20
4145 Harris Hall

The fundamental EKR theorem states that, when $n >= 2r$, no pairwise intersecting family of r-subsets of $\{1, 2, ..., n\}$ is larger than the family of all r-subsets that each contain some fixed x (star at x), and that a star is strictly largest when $n > 2r$. We will discuss conjectures and theorems relating to a generalization to graphs, in which only independent sets of a graph are allowed. In joint work with Kamat we give a new proof of EKR that is injective, and also provide results on a special class of trees called spiders.