VCU Discrete Mathematics Seminar

"Graph" Saturation

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Tuesday, Sept. 17 12:30–1:20 4119 Harris Hall

Let H be a graph. A graph G is an H-saturated graph if G does not contain H as a subgraph, but $G \cup e$ contains a copy of H for any edge e, not in G. The saturation number of H, denoted by sat(n, H) is the minimum number of edges in an H-saturated graph G of order n. In this talk, I will present a survey of some of the classical results on saturation number, a comparison of the saturation number sat(n, H) with the Turán extremal number ex(n; H), in addition to a variety of extensions including a combinatorial game approach. One focus will be on some recent results with numerous problems and questions presented. (The quotes in the title are to indicate that these problems and questions extend to other combinatorial structures, if time permits.)



For the full schedule of speakers, titles and abstracts for Fall 2013, see: http://www.people.vcu.edu/~dcranston/DM-seminar/