Combinatorics Seminar

Wednesday, November 13th, 2019, at 1:10pm in Hume 321.

Dr. Vaidyanathan Sivaraman, Mississippi State University.

Title: Forbidden induced subgraphs for threshold-like graph classes

Abstract. Every hereditary graph class (closed under induced subgraphs) has a characterization by forbidden induced subgraphs: graphs not in the class but every graph obtained by deleting a vertex is in the class. Finding the forbidden induced subgraph characterization for a graph class is a good step in understanding the graph class. Such a characterization will be provided for three generalizations of threshold graphs: mock threshold graphs, sum-perfect graphs, and double-threshold graphs. The first two are theorems while the last one is conjectural, and work in progress.
This is joint work with Richard Behr, Thomas Zaslavsky, Bart Litjens, Sven Polak, and Deven Gill.