A rainy foray into hypergraph-land. Sean English, Nathan Graber, Pamela Kirkpatrick*, Abhishek Methuku, Eric C. Sullivan

Each edge of a graph is defined by its two endpoints called vertices. We will discuss a generalization of graphs in which edges can be defined by any number of vertices. We call these structures hypergraphs. Many ideas in graph theory can be extended to hypergraphs. One such notion is that of saturation. A graph G is F-saturated if G does not contain F as a subgraph but $G+e$ does contain F for any edge e not in G. A hypergraph analogue of saturation will be presented along with results for specific F graph families.