

Perfect packings in hypergraphs

Richard Mycroft, University of Birmingham

Let G and H be graphs or k -graphs (k -uniform hypergraphs). Then a perfect H -packing in G is a collection of vertex-disjoint copies of H in G which together cover all vertices of G . For graphs, the minimum degree condition needed to ensure the existence of a perfect H -packing in G was considered by several authors, before finally Kühn and Osthus gave a condition for any graph H which is best-possible up to an additive constant. However, very few analogous results for k -graphs are known outside the case of a perfect matching (when H consists of a single edge). In this talk I will outline some recent developments for this problem.