

Many important theorems and conjectures in combinatorics can be rephrased as problems about counting independent sets in some specific graphs and hypergraphs. The Container Method, whose basic idea can be traced back to Kleitman-Winston, and has recently been further developed by Balogh-Morris-Samotij and Saxton-Thomason, essentially states that hypergraphs satisfying some natural conditions have very few independent sets. In this survey-style talk I will show some recent applications of the method, and try to give an easy recipe containing all the key ideas one needs to know to prove similar results. This is joint work with Józsi Balogh and Andrew Treglown.