ANTHONY BONATO, Ryerson University

Independence densities of hypergraphs

We consider the number of independent sets in hypergraphs, which allows us to define the independence density of countable hypergraphs. Hypergraph independence densities include a broad family of densities over graphs and relational structures, such as F-free densities of graphs for a given graph F. We consider the rationality of independence densities of hypergraphs, and present extensions using independence polynomials.