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Packing hypergraphs with few edges

Two n -vertex hypergraphs G and H pack if there is a bijection $f : V(G) \rightarrow V(H)$ such that for every edge $A \in E(G)$, $f(A)$ is not an edge. Our result: If $n \geq 10$ and two n -vertex hypergraphs G and H with no 1-, $(n-1)$ -, and n -edges satisfy $|E(G)| \leq |E(H)|$ and $|E(G)| + |E(H)| \leq 2n - 3$, then G and H fail to pack if and only if every vertex of G is incident to a 2-edge, and H has a vertex incident to $n-1$ 2-edges. The result generalizes Bollobás–Eldridge Theorem. This is joint work with C. Stocker and P. Hamburger.