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*Perfect matchings in uniform hypergraph with large vertex degree*

A perfect matching in a 3-uniform hypergraph on  $n = 3k$  vertices is a subset of  $\frac{n}{3}$  disjoint edges. We prove that if  $H$  is a large 3-uniform hypergraph on  $n = 3k$  vertices such that every vertex belongs to more than  $\binom{n-1}{2} - \binom{2n/3}{2}$  edges, then  $H$  contains a perfect matching. We also show that if  $H$  is a large 4-uniform hypergraph on  $n = 4k$  vertices such that every vertex belongs to more than  $\binom{n-1}{3} - \binom{3n/4}{3}$  edges, then  $H$  contains a perfect matching. Both of these bounds are tight.