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**David Offner\*** ([offnerde@westminster.edu](mailto:offnerde@westminster.edu)), Department of Math and CS, Westminster College, New Wilmington, PA 16172. *Packing the hypercube.*

Let  $G$  be a subgraph of the  $n$ -dimensional hypercube  $Q_n$ . We consider two problems: First, is it possible to cover all vertices of  $Q_n$  using vertex-disjoint copies of  $G$ ? Second, is it possible to cover all edges of  $Q_n$  using edge-disjoint copies of  $G$ ? In the late 80's, Stout announced that for all  $G$ , and for  $n$  sufficiently large, it is possible to cover any given proportion  $\alpha < 1$  of the vertices of  $Q_n$ , and conjectured that the same is true for edges. We will present a proof of this conjecture which uses as its main tool the Rödl nibble. (Received September 21, 2010)