1146-05-325 Hongliang Lu and Xingxing Yu\* (yu@math.gatech.edu), School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332, and Xiaofan Yuan (xyuan@gatech.edu), School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332. Nearly perfect matchings in uniform hypergraphs.

We prove that, for integers k, l, n, m with  $k \ge 3$ , k/2 < l < k-1,  $m \le n/k - 1 - (1 - l/k) \lceil (k - l)/(2l - k) \rceil$ , and  $n \gg n - km$ , if H is a k-uniform hypergraph on n vertices and  $\delta_l(H) > \binom{n-l}{k-l} - \binom{(n-l)-m}{k-l}$ , then H has a nearly perfect matching, i.e., a matching covering all but a constant number of vertices. This improves upon an earlier result of Hàn, Person, and Schacht for the range k/2 < l < k-1. When k = 3, with the help of an absorbing lemma of Hàn, Person, and Schacht, our proof also shows that H has a perfect matching, a result proved by Kühn, Osthus, and Treglown and, independently, by Khan. (Received January 25, 2019)