1102-05-55 **Jie Han*** (jhan22@gsu.edu). *Near Perfect Matchings in k-uniform Hypergraphs.*

Let H be a k-uniform hypergraph on n vertices where n is a sufficiently large integer not divisible by k. We prove that if the minimum $(k-1)$-degree of H is at least $\lfloor n/k \rfloor$, then H contains a matching with $\lfloor n/k \rfloor$ edges. This confirms a conjecture of Rödl, Ruciński and Szemerédi, who proved that minimum $(k-1)$-degree $n/k + O(\log n)$ suffices. More generally, we show that H contains a matching of size d if its minimum codegree is $d < n/k$, which is also best possible. (Received July 12, 2014)