1132-05-214 **Guiying Yan*** (yangy@amss.ac.cn), Zhongguancun East road, No.55, Haidian District.Beijing, Beijing, 100190, Peoples Rep of China. *An approximate Ore-type result for tight Hamilton cycles in uniform hypergraphs.* Preliminary report.

A Hamilton l-cycle in a k-uniform hypergraph of n-vertex is an ordering of all vertices, combined with an ordered subset C of edges, such that any two consecutive edges share exactly l vertices and each edge in C contains k consecutive vertices. A classic result of O. Ore in 1960 is that if the degree sum of any two independent vertices in an n-vertex graph is at least n, then the graph contains a Hamiltonian cycle. Naturally, we consider to generalize it to hypergraphs situation. In this paper, we prove the following theorems. (i) for any $n \geq 4k2$, there is an n-vertex k-uniform hypergraph, with degree sum of any two strongly independent sets of k1 vertices bigger than 2n4(k1), contains no Hamilton l-cycle, $1 \leq l \leq k1$. (ii) if the degree sum of two weakly independent sets of k1 vertices in an n-vertex k-uniform hypergraph is $(1 + o(1))n$, then the hypergraph contains a Hamilton (k1)-cycle, where two distinct sets of k1 vertices are weakly (strongly) independent if there exist no edge containing the union of them (intersecting both of them). (Received July 22, 2017)