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Jessica C De Silva* (jessica.desilva@huskers.unl.edu). *Computational complexity of Hamiltonian ℓ -cycles*. Preliminary report.

A hamiltonian ℓ -cycle in an n -vertex k -uniform hypergraph is a cyclic ordering of the vertices such that every edge consists of k consecutive vertices and every pair of consecutive edges overlap in exactly ℓ vertices. Karpiński, Ruciński, and Szymańska studied the computational complexity of hamiltonian ℓ -cycles in dense hypergraphs for $\ell = k - 1$. Their results extend to all ℓ such that $(k - \ell)$ divides k . We study the case for ℓ such that $(k - \ell)$ does not divide k . (Received February 22, 2016)