1116-05-1066 Thomas Grubb, Kyutae Paul Han* (kyutae.han.16@dartmouth.edu) and Victoria Horan. $Overlap \ cycles \ of {[n] \atop k}.$

Universal cycles and Gray codes lists elements of a combinatorial family in a specific manner, and overlap cycles were introduced as a generalization of these in 2010 by Godbole et al. An *s*-overlap cycle orders a set of strings so that the last *s* letters of any one string are the first *s* letters of the next (in order). In this paper, we study *s*-overlap cycles of $\binom{[n]}{k}$, *k*-subsets of the set $[n] = \{1, 2, ..., n\}$, and prove that when k > 3s, *s*-overlap cycles of $\binom{[n]}{k}$ do exist. (Received September 16, 2015)