1154-05-1358 **Rachel Zhang*** (rachelyz@mit.edu). *C-(k,ℓ)-Sum-Free Sets.* Preliminary report.

The Minkowski sum of two subsets A and B of a finite abelian group G is defined as all pairwise sums of elements of A and B: $A+B=\{a+b : a \in A, b \in B\}$. The largest size of a (k,ℓ)-sum-free set in G has been of interest for many years and in the case $G=\mathbb{Z}/n\mathbb{Z}$ has recently been computed by Bajnok. Motivated by sum-free sets of the torus, Kravitz introduces the noisy Minkowski sum of two sets, which can be thought of as discrete evaluations of these continuous sumsets. That is, given a noise set C, the noisy Minkowski sum is defined as $A +_C B = A+B+C$. We give bounds on the maximum size of a (k,ℓ)-sum-free subset of $\mathbb{Z}/n\mathbb{Z}$ under this new sum, for C equal to an arithmetic progression with common difference relatively prime to n and for any two element set C. (Received September 15, 2019)