

1161-11-270

Michael A. Freeze* (freezem@uncw.edu), Department of Mathematics and Statistics, 601 South College Road, Wilmington, NC 28403. *A Modified Erdős-Ginzburg-Ziv Constant for Cyclic Groups*. Preliminary report.

A classical result of Erdős, Ginzburg, and Ziv states that any sequence of $2n - 1$ elements in the cyclic group \mathbb{Z}_n contains a subsequence of length n that sums to the group identity 0 (that is, a zero-sum subsequence). Let G be an additive abelian group and let $\mathcal{L} \subseteq \mathbb{N}$. Define the *modified* generalized Erdős-Ginzburg-Ziv constant $s'_{\mathcal{L}}(G)$ to be the minimum length ℓ such that any zero-sum sequence of length at least ℓ in G contains a subsequence that sums to 0, with the length of the subsequence being in \mathcal{L} . Note that the notation for this constant follows that of A. Berger's recent work considering the case when \mathcal{L} is singleton with $G = \mathbb{Z}$, among other restrictions. We discuss the value of $s'_{\mathcal{L}}(\mathbb{Z}_n)$ for several choices of length set \mathcal{L} . (Received August 18, 2020)