1108-05-131 J Balogh and H Liu (m.sharifzadeh@gmail.com), Champaign, IL 61820, and M Sharifzadeh* (sharifz2@illinois.edu) and A Treglown. The number of maximal sum-free subsets of integers.

Cameron and Erdős raised the question of how many maximal sum-free sets there are in $\{1, \ldots, n\}$, giving a lower bound of $2^{\lfloor n/4 \rfloor}$. In this paper we prove that there are in fact at most $2^{(1/4+o(1))n}$ maximal sum-free sets in $\{1, \ldots, n\}$. Our proof makes use of container and removal lemmas of Green as well as a result of Deshouillers, Freiman, Sós and Temkin on the structure of sum-free sets. (Received January 07, 2015)