Mathematics, Statistics, and Computer Science    **@ UIC**

## Combinatorics Seminar

### *The number of maximal sum-free subsets of integers*

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**Abstract:** Abstract: Cameron and Erdos 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, S\'os and Temkin on the structure of sum-free sets. Joint work with: Jozsef Balogh, Hong Liu and Andrew Treglown

Monday, October 27 at 3:00 PM in SEO 427