

1139-05-122

Joel O Moreira* (joel.moreira@northwestern.edu), **Florian Karl Richter** and **Donald Robertson**. *The Erdos sumset conjecture.*

Erdos conjectured that every set $A \subset \mathbb{N}$ with positive density contains a sum $B + C := \{b + c : b \in B, c \in C\}$ of two infinite sets. I will talk about an approach to this conjecture using ideas from ergodic theory as a guide, including an intersectivity theorem of Bergelson, the splitting of an arbitrary function into an almost periodic and a weak mixing components, and some borrowed techniques from Beiglbock's proof of Jin's theorem. (Received February 05, 2018)