Algebra Seminar

Applying the Kővári-Sós-Turán theorem to a question in group theory

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Date: August 13th, 2021

Time: 2:30 pm

Acesso à sala virtual:

Abstract. Let $m \leq n$ be positive integers and $\mathfrak{X}$ a class of groups which is closed for subgroups, quotient groups and extensions. Suppose that a finite group G satisfies the condition that for every two subsets M and N of cardinalities m and n, respectively, there exist $x \in M$ and $y \in N$ such that $\langle x, y \rangle \in \mathfrak{X}$. Then either $G \in \mathfrak{X}$ or $|G| \leq \left(\frac{180}{53}\right)^m (n-1)$.