Combinatorics Seminar

Thursday, October 2, 2003

2:00 pm in Hume 331

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On Szemerédi's Regularity Lemma

ABSTRACT

Szemerédi's Regularity Lemma states that for every $\epsilon > 0$ and every integer $m \geq 1$ there exist an integer M such that every graph of order at least m admits an ϵ-regular partition $\{V_0, V_1, ..., V_k\}$ with $m \leq k \leq M$. We will give an account of the theory behind Szemerédi's Regularity Lemma and provide a partial proof of the result. Then we will conclude with several applications of this major result.