

Boğaziçi MATH COLLOQUIUM

Some Density Ramsey type results.

Konstantinos Tyros

Koç University

Abstract: The aim of this talk is to present the density versions of the Hales-Jewett Theorem and the Carlson-Simpson Theorem. The Hales-Jewett Theorem is one of the most representing results in Ramsey theory. Its density version was first proved by H. Furstenberg and Y. Katznelson in 1991 using Ergodic Theory. However, since then, combinatorial proofs have been discovered. The Density Hales-Jewett Theorem has as a consequence Szemerédi's Theorem on arithmetic progressions as well as its multidimensional version. The Density Carlson-Simpson Theorem is an extension of the Density Hales-Jewett Theorem and concerns the space of the left variable words.

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Time: 15:00

Place: TB 250, Boğaziçi University