

Coloring problems and reverse mathematics

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Thursday, October 16, 2008

007 Kemeny Hall, 4:00 pm
(Tea 3:30 pm 300 Kemeny Hall)

Abstract

If we color the natural numbers with a finite number of colors, then there must be an infinite subset that is monochromatic. This statement is an infinite version of the pigeonhole principle, which can be generalized in various forms of Ramsey's theorem. This talk will present some of these theorems and analyze their relative strength using techniques from reverse mathematics. Familiarity with Ramsey theory and reverse mathematics is not a prerequisite for the talk, nor should it be a liability.