

Ramsey's theorem and computability theory
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Thursday, April 25, 2002
102 Bradley Hall, 4 pm
Tea 3:30 pm, Math Lounge

Abstract: An infinite version of Ramsey's theorem states that for every coloring of $[\omega]^n$ (the set of all n -element subsets of ω) by finitely many colors, there is an infinite set A which is homogeneous for that coloring, i.e., all elements of $[A]^n$ have the same color. After an introduction to the necessary background in computability theory, we present a survey of results concerning the complexity of infinite homogeneous sets for effectively given (computable or computably enumerable) colorings.