

Meeting: 1001, Evanston, Illinois, SS 8A, Special Session on Computability Theory and Applications

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Investigations into the strength of various partition theorems such as Ramsey's Theorem have played an important role in logic. In both set theory (in the realm of large cardinals) and proof theory (such as the Paris-Harrington Theorem), a reasonably detailed picture has emerged. However, despite significant progress in the last decade, the strength of Ramsey's Theorem from the viewpoint of computability theory and reverse mathematics is still full of mystery and intrigue, and many fundamental questions remain. With an eye towards answering these questions, we will discuss some recent results about Ramsey degrees, i.e. those Turing degrees which are able to compute homogeneous sets for every computable 2-coloring of pairs of natural numbers. (Received August 23, 2004)