Variations in Ramsey Theory

Drake Olejniczak*, Western Michigan University

The classical Ramsey number of $s$ and $t$ is the order of the smallest complete graph for which every red-blue coloring of its edges results in red $K_s$ or a blue $K_t$. This problem proves difficult enough, even for some small values of $s$ and $t$, and many problems are open. While progress is still being made on this classical case, variations and generalizations of this Ramsey number have been introduced and have become a popular area of research. In this talk, we present some recent results and new variations on this topic.

Keywords: graph colorings, Ramsey theory, Ramsey number