

Abstract

We introduce the list colouring extension of classical Ramsey numbers, investigate when the two Ramsey numbers are equal, and in general, how far apart they can be from each other. We find graph sequences where the two are equal and where they are far apart. For ℓ -uniform cliques we prove that the list Ramsey number is bounded by an exponential function, while it is well-known that the Ramsey number is super-exponential for uniformity at least 3. This is in great contrast to the graph case where we cannot even decide the question of equality for cliques. Joint work with Noga Alon, Matija Bucić, Tom Kalvari, and Eden Kuperwasser.