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*Bounding  $\chi$  as a convex combination of  $\omega$  and  $\Delta + 1$*

Abstract: It has been conjectured that  $\chi$  is at most  $\lceil \frac{\omega + \Delta + 1}{2} \rceil$ . It is known that there is a positive  $\epsilon$  such that  $\chi \leq \lceil \epsilon\omega + (1 - \epsilon)(\Delta + 1) \rceil$ . We provide a new proof of the latter result which yields an improved value of  $\epsilon$ . This is joint work with Andrew King.