Recent work on the Erdős-Hajnal Conjecture

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A typical graph contains cliques and independent sets of no more than logarithmic size. The Erdős-Hajnal Conjecture asserts that if we forbid some induced subgraph H then we can do much better: the conjecture claims that there is some $c = c(H) > 0$ such that every H-free graph G contains a clique or independent set of size at least $|G|^c$. The conjecture looks far out of reach, and is only known for a small family of graphs. We will discuss some recent progress.

Joint work with Tung Nguyen and Paul Seymour.