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*On generalized Ramsey numbers of Erdős and Rogers*

Extending the concept of Ramsey numbers, Erdős and Rogers introduced the following function. For given integers  $2 \leq s < t$  let

$$f_{s,t}(n) = \min\{\max\{|W| : W \subseteq V(G) \text{ and } G[W] \text{ contains no } K_s\}\},$$

where the minimum is taken over all  $K_t$ -free graphs  $G$  of order  $n$ . In this talk, we present some old and recent developments concerning this function. In particular, we partially confirm an old conjecture of Erdős by showing that  $\lim_{n \rightarrow \infty} \frac{f_{s+1,s+2}(n)}{f_{s,s+2}(n)} = \infty$  for any  $s \geq 4$ . This is a joint work with John Retter and Vojta Rödl.