

# CONNECTED GRAPHS WITHOUT LONG PATHS

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## **Abstract**

We determine the maximum number of edges in a connected graph with  $n$  vertices that contains no path with  $k+1$  vertices. The technique used determines the extremal graphs with this property strengthening an earlier result of G. N. Kopylov who determined the extremal number. Joint work with P. Balister, E. Gyori, and J. Lehel