

1073-05-30

**Ralph J. Faudree** and **Ronald J. Gould\*** (rg@mathcs.emory.edu), Department of Math and CS, Atlanta, GA 30322, and **Michael S. Jacobson**. *More about cycles in generalized claw-free graphs.*

For  $s \geq 3$ , a graph is  $K_{1,s}$ -free if it does not contain an induced subgraph isomorphic to  $K_{1,s}$ . In this talk we will look at some recent results about disjoint cycles in  $K_{1,s}$ -free graphs, for  $s \geq 3$ . In particular, we show that if  $G$  is  $K_{1,s}$ -free of sufficiently large order  $n = 3k$  with  $\delta(G) \geq n/2 + c$  for some constant  $c = c(s)$ , then  $G$  contains  $k$  disjoint triangles. Analogous results with the complete graph  $K_3$  replaced by a complete graph  $K_m$  for  $m \geq 3$  are also shown. Using this work we also prove a  $K_{1,s}$ -free version of the Posa-Seymour conjecture. (Received July 11, 2011)