1077-05-1584 **Stephen G Hartke** and **Derrick Stolee*** (s-dstolee1@math.unl.edu). *Uniquely K_r-saturated graphs.* Preliminary report.

A graph is uniquely K_r-saturated if it does not contain an r-clique but for every edge e in the complement $\overline{G}$ there is a unique r-clique in $G + e$. Removing a dominating vertex creates a uniquely K_{r-1}-saturated graph, so we focus on graphs with no dominating vertex. Previous work found a limited number of these graphs and it was conjectured that there are a finite number for each r and that each such graph was regular. Using a custom computational method, we find several new graphs of orders 13–18 as well as a new infinite family. Moreover, one of these graphs is irregular. (Received September 20, 2011)