1120-05-305 **József Balogh** and **Cory Palmer*** (cory.palmer@umontana.edu). *On the tree packing conjecture.*

A set of graphs is said to pack into the complete graph, K_n, if the graphs can be found as edge-disjoint subgraphs of K_n. In 1978, Gyárfás conjectured that for any set of $n-1$ trees $T_1, T_2, \ldots, T_{n-1}$ such that T_i has $n-i$ edges packs into K_n. Even when we weaken the statement to claim that the largest $t > 3$ trees $T_1, T_2, \ldots, T_t$ pack into K_n the conjecture remains open. Among others we will discuss our result that any set of $t = \frac{1}{10}n^{1/4}$ trees $T_1, T_2, \ldots, T_t$ such that T_i has $n-i$ edges packs into K_{n+1} (for n large enough). We will also survey the history of this conjecture and discuss several related packing problems. (Received February 23, 2016)