1077-05-417 **Linda M. Lesniak*** (lindalesniak@gmail.com). *Chvátal's t_0-tough conjecture.* Preliminary report.

For a nonnegative real number t, a noncomplete graph G is $t-tough$ if $|S| \geq t \cdot k(G-S)$ for every vertex cut S of G, where $k(G-S)$ denotes the number of components of $G-S$. In 1973, Chvátal conjectured that there exists a t_0 such that every t-tough graph is hamiltonian. The history and current status of this conjecture will be discussed. (Received August 30, 2011)