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Serguei Norine* (snorine@gmail.com) and **Robin Thomas**. *K_t -minors in large t -connected graphs*. Preliminary report.

A well-known and beautiful conjecture of Jorgensen asserts that every 6-connected graph without a K_6 -minor is apex (can be made planar by deleting one vertex). The conjecture does not generalize straightforwardly to larger complete minors, as for every $t \geq 8$ there exist t -connected graphs, which contain no K_t minor and can not be made planar by deleting $(t - 5)$ vertices. However, Thomas conjectured that the size of all such graphs can be bounded by a function of t .

In recent joint work with DeVos, Hegde, Karawabayashi and Wollan, we proved that Thomas' conjecture holds for $n = 6$, i.e. we have shown that Jorgensen's conjecture holds for all sufficiently large graphs. In this talk, we will report progress on the conjecture for higher values of t . In particular, at the moment, we appear to be very close to verifying the conjecture for $t = 8$. (Received February 02, 2008)