1120-05-189 **Andrzej Dudek*** (andrzej.dudek@wmich.edu) and **Patrick Bennett** (patrick.bennett@wmich.edu). *On the Ramsey-Turán number with small s-independence number.*

Let s be an integer, $f = f(n)$ a function, and H a graph. Define the *Ramsey-Turán number* $\mathbf{RT}_s(n, H, f)$ as the maximum number of edges in an H-free graph G of order n with $\alpha_s(G) < f$, where $\alpha_s(G)$ is the maximum number of vertices in a K_s-free induced subgraph of G. The Ramsey-Turán number attracted a considerable amount of attention and has been mainly studied for f not too much smaller than n. In this talk, we consider $\mathbf{RT}_s(n, K_t, n^\delta)$ for fixed $\delta < 1$. In particular, we show that for an arbitrarily small $\varepsilon > 0$ and $1/2 < \delta < 1$, $\mathbf{RT}_s(n, K_{s+1}, n^\delta) = \Omega(n^{1+\delta-\varepsilon})$ for all sufficiently large s. This is nearly optimal, since a trivial upper bound yields $\mathbf{RT}_s(n, K_{s+1}, n^\delta) = O(n^{1+\delta})$. Furthermore, the range of δ is as large as possible. We also discuss a phase transition of $\mathbf{RT}_s(n, K_{2s+1}, f)$ extending some recent result of Balogh, Hu and Simonovits. (Received February 21, 2016)