Christopher Cox, Michael Ferrara, Ryan R Martin and Benjamin Reiniger*
(reiniger@ryerson.ca). Chvátal-type results for degree sequence Ramsey numbers.

A sequence of nonnegative integers is called graphic if it is the degree sequence of some simple graph; such a graph is called a realization of the sequence. For a graph $H$, a graphic sequence is called potentially $H$-graphic if some realization contains $H$ as a subgraph. We will discuss a degree sequence analogue of the graph Ramsey number: the potential-Ramsey number of graphs $H_1$ and $H_2$ is the minimum integer $N$ such that for every $N$-term graphic sequence $\pi$, either $\pi$ is potentially $H_1$-graphic or the complementary sequence $\pi$ is potentially $H_2$-graphic.

Chvátal found the exact value of the classical Ramsey number of a complete graph vs. a tree. We find the value of the potential-Ramsey number when the tree is large enough compared to the complete graph: if $s \geq 2$ and $T$ is a tree with $|V(T)| \geq 9(s - 2)$, then the potential-Ramsey number of $K_s$ and $T$ is equal to $t + s - 2$. In order to prove this, we prove a sharp sufficient condition for an arbitrary graph to pack with a forest, following the lead of the classical Sauer-Spencer theorem. (Received September 17, 2015)