1127-05-181   **Catherine Erbes*** (`erbescc@hiram.edu`), **Michael Ferrara**, **Ryan Martin** and **Paul Wenger**. *Stability of the Potential Function.*

The potential number of a graph H, denoted $\sigma(H, n)$, is the minimum even integer such that any graphic sequence of length n has a realization containing H as a subgraph. This is the degree-sequence analogue of the extremal number, $\mathrm{ex}(n, H)$. Inspired by Simonovits' classical result on the stability of the extremal function, we investigate a notion of stability for the potential number, called σ-stability. Unlike in Simonovits' result, we show that there are classes of graphs which are not σ-stable. We will give a sufficient condition for a graph to be σ-stable, and characterize the stability of those graphs H which have an induced subgraph of order $\alpha(H) + 1$ that contains exactly one edge. (Received February 02, 2017)