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**Catherine Erbes\*** ([catherine.erbes@ucdenver.edu](mailto:catherine.erbes@ucdenver.edu)), **Michael Ferrara**, **Ryan R. Martin**  
and **Paul Wenger**. *Degree-Sequence Stability of Graphs*.

A sequence of nonnegative integers is *graphic* if it is the degree sequence of a graph  $G$ ; such a graph is called a *realization* of the sequence. 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 classical extremal number. The potential number has been determined asymptotically for general graphs  $H$ , and a family of extremal sequences that achieve this number is known. In this talk we give a stability result for the potential problem, similar to the stability results of Erdős and Simonovits for the Turán problem. A graph  $H$  has degree-sequence stability if every graphic sequence  $\pi$  with sum close to  $\sigma(H, n)$  having no realization containing a copy of  $H$  can be transformed into an extremal sequence with  $o(n)$  additions and subtractions. We discuss families of graphs that do and do not have degree-sequence stability. (Received September 16, 2013)