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Jennifer Diemunsch, Michael Ferrara* (michael.ferrara@ucdenver.edu), **Sogol Jahanbekam** and **James Shook**. *New Results on Packing Graphic Sequences*.

A sequence $\pi = (d_1, \dots, d_n)$ is graphic if there is a simple graph G with vertex set $\{v_1, \dots, v_n\}$ such that the degree of v_i is the i th entry of π . We say that graphic sequences $\pi_1 = (d_1^{(1)}, \dots, d_n^{(1)})$ and $\pi_2 = (d_1^{(2)}, \dots, d_n^{(2)})$, *pack* if there exist edge-disjoint n -vertex graphs G_1 and G_2 such that for $j = 1, 2$, $d_{G_j}(v_i) = d_i^{(j)}$ for all $i = 1, \dots, n$.

In this talk, we give several conditions that ensure a pair of sequences pack. In particular, if Δ_j be the maximum degree of π_j for $j = 1, 2$ and $(\Delta_1 + 1)(\Delta_2 + 1) \leq n + 1$ then π_1 and π_2 pack. This result is a degree sequence analogue to the well-studied Bollobás-Eldridge-Catlin graph packing conjecture. We also discuss applications of degree sequence packing to discrete imaging science, along with some results on packing degree sequences of uniform hypergraphs. (Received July 28, 2014)