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**Alessandra K Graf\*** (ag668@nau.edu). *A New Graceful Labeling for Pendant Graphs.*

A graceful labeling of a graph  $G$  with  $q$  edges is an injective assignment of labels from  $\{0, 1, \dots, q\}$  to the vertices of  $G$  such that when each edge is assigned the absolute value of the difference of the vertex labels it connects, the resulting edge labels are distinct. A labeling of the first kind for coronas  $C_n \odot K_1$  occurs when vertex labels 0 and  $q = 2n$  are assigned to adjacent vertices of the  $n$ -gon. A labeling of the second kind occurs when  $q = 2n$  is assigned to a pendant vertex. Previous research has shown that all coronas  $C_n \odot K_1$  have a graceful labeling of the second kind. In this presentation we will show that all coronas  $C_n \odot K_1$  with  $n \equiv 3, 4 \pmod{8}$  also have a graceful labeling of the first kind. (Received September 25, 2012)