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**Jill Bigley Dunham\***, 401 Rosemont Ave., Frederick, MD 21701. *Extremal coin graphs on multiple radii*. Preliminary report.

In this research, we consider extremal coin graphs in the Euclidean plane. The problem of determining the maximum number of edges of a unit coin graph on  $n$  vertices has been solved previously by Heiko Harborth. We generalize the problem to coin graphs with multiple possible radii. A motivating problem is a special case of a coin graph with two possible radii. (Received August 13, 2010)