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The Subgraph Summability number,  $\sigma(G)$ , of a connected graph  $G$  is the largest integer defined by labeling the vertices of  $G$  so that the label sums of connected induced subgraphs cover the set of positive integers  $\{1, 2, \dots, \sigma(G)\}$ . This is a generalization of problems in number theory and design theory. In this talk we present subgraph summability numbers of certain graph classes including double star, crown, and broom graphs. (Received July 22, 2009)