1106-VN-2445 **Aquia Richburg***, 830 Westview Dr. SW, Atlanta, GA 30314, and **Shannon Jordan**, **Roger Licairac** and **Eugene Fiorini**. *Forbidden Subgraphs of Competition Graphs on Doubly Partial Orders.*

Let D=(V,A) be an acyclic digraph with vertex set V, ordered by reachability, and directed edge set A. The competition graphC(D) = (V,E) is an undirected graph with the same vertex set as D and an edge (x,y) between distinct vertices x,y in V if there exists a vertex u in V such that (x,u), (x,u) in A. If x and y are connected in C(D), they are said to be in competition. Competition graphs have application in coding, radio transmission and modeling of complex economic systems. This paper classifies forbidden subgraphs of competition graphs on a doubly partial order. These results are extended to competition graphs on n-tuply partial order sets and correlation to Dyck paths and Catalan numbers is discussed. (Received September 16, 2014)