

**Meeting:** 1004, Bowling Green, Kentucky, SS 2A, Special Session on Graph Theory

1004-05-28            **Dan Pritikin\*** (pridikd@muohio.edu), Dept of Math & Stat, Miami University, Oxford, OH  
45056. *Odd-degenerate Graphs.*

Consider a uniformly random graph on vertex set  $1,2,\dots,n$ . Uniformly, randomly select a vertex of odd degree (if such vertices exist) and delete that vertex, repeating this process in the graph remaining until every vertex now has even degree. We find the exact probability that the graph ultimately remaining is the trivial graph. This result has ramifications concerning odd-degenerate graphs, a kind of graph with applications to a certain graph solitaire game. Another exact result is obtained when instead deleting at each stage a random vertex of even degree. (Received December 30, 2004)