

1096-G5-1349      **Alexandra Iovine\*** (aiovine.student@manhattan.edu), **Janie Schlauder** and **Helene R. Tyler**. *Pitch Perfect? Analyzing the Passing Networks of Manhattan College Women's Soccer*. Preliminary report.

We will report on the results of our fall 2013 research seminar in network theory. In a recent paper, Peña and Touchette [1] performed a network theory analysis of the 2010 World Cup soccer teams by viewing the players as nodes and the passes as arrows in a weighted directed graph. They used various centrality measures to quantify an individual player's importance and to describe how players are clustered within the network. Following their example, we worked to perform a similar analysis of the Manhattan College Women's Soccer team. This talk should be accessible to undergraduates with a solid background in linear algebra.

References: [1] J.L. Peña and H. Touchette. A network theory analysis of football strategies. <http://arxiv.org/abs/1206.6904> (Received September 15, 2013)