1046-N1-1548   **David J Hunter*** (`dhunter@westmont.edu`), Department of Mathematics, Westmont College, 955 La Paz Road, Santa Barbara, CA 93108. *Major League Baseball Meets Facebook: Modeling Trades Using Social Network Theory.*

A *social network* is a graph model for the relationships among the members of some population. The vertices, or *actors*, model the individual members, while the edges, or *ties*, indicate how actors are related. The history of transactions between major league baseball franchises is a good source of social network data: each franchise is an actor, and the ties are weighted according to the number of trades made between franchises. This talk will give a brief overview of some of the main concepts in social network theory at a level suitable for use in the undergraduate curriculum and undergraduate research projects. The franchise/trade example sheds some light on the business of baseball while illustrating how ideas from social network theory can bring interesting new applications into discrete mathematics and combinatorics courses. (Received September 16, 2008)