Meeting: 1003, Atlanta, Georgia, MAA CP X1, MAA General Contributed Paper Session, I

1003-X1-672 Paul F Gibson\* (minzhang3@yahoo.com), Department of Mathematics, Delaware State University, Dover, DE 19901, and Wenbo Li, Fengshan Liu and Xiquan Shi. The Last Round Matching Problem.

The last round matching problem is a variation of the classical n hat selection problem. In this variation, those men who select their own hat in any round exit the game and those who remain reselect until all men select their own hat, the last round. One considers the expectation  $l_n$  of the number of rounds, the convergence of the sequence  $(l_n)$  and the rate of convergence of  $(l_n)$ . Also a relationship between the higher moments of the classical n hat selection random variable and the Bell number  $(B_n)$  is found. (Received September 27, 2004)