

1023-D1-1811 **Ann E Moskol*** (amoskol@ric.edu), 2 Longmeadow Rd, Lincoln, RI 02865. *The Hat Problem and Coding Theory*. Preliminary report.

This talk will discuss the optimum strategy for solving the 3-person Hat problem. The solution is related to error-correcting Hamming codes. I will illustrate how Venn diagrams can be used to 1) determine the appropriate check bits when transmitting a 4-bit message and 2) correct a 1-bit error in the received code. This example can be used to find an optimum strategy for a 7-person Hat problem! (Received September 26, 2006)