

VCU Discrete Mathematics Seminar

Hat Guessing Games

Prof Daniel Cranston
VCU!

Tuesday, April 26
12:30–1:20
4145 Harris Hall

In a hat guessing game, an adversary puts a white or black hat on the head of each person on a team, say with n people. Each person can see the color of every hat but their own. The team can strategize ahead of time, but cannot communicate once the hats are placed. Their goal is to guess in a way to maximize the number of correct guesses, regardless of how the hats are placed. We will present an optimal strategy for this problem, as well as discuss some generalizations, such as when the adversary has more than two colors of hats to choose from or when people can't always see all hats but their own.

This is an expository talk, with lots of pictures and examples. It is based on a paper of Butler, Hajiaghayi, Kleinberg, and Leighton.



For more information on our schedule, see:
<http://www.people.vcu.edu/~dcranston/DM-seminar/>