

Description:

The two folders contain Matlab programs that accompany the paper by Xiao, J., "Equilibrium Analysis of the All-Pay Contest with Two Nonidentical Prizes: Complete Results".

Folder "onecontest":

This folder contains programs to construct equilibrium strategies and payoffs for a three-player contest with any prize sequence. In the folder, run "fixedcostprize.m". It calculates the expected payoffs and performance in the unique equilibrium and plots the mixed strategies of the three players in the equilibrium.

As special cases, the programs also construct the strategies in Figures 3-6 in the paper.

The programs in this folder are also building blocks for those in folder "allcosts", which compute the optimal prize allocations for each cost vector in a simplex.

Folder "allcosts":

This folder contains programs to create Figure 8 in the paper. In the folder, run "allcosts.m", and it produces the figure. The resulting figure of the full-scale simulation is saved as "Figure 8.fig".