**Predicting convergence in the Stag Hunt and Chicken games**

The computations above illustrate Fictitious Plays’ performance in self play in the “Chicken” and “Stag Hunt” games. The prior models for strategies were selected respectively Prow(stag) = 1, Pcol(hare) = 0 and Prow(stag) = 0, Pcol(hare) = 1 and Prow(stag) = 1/2, Pcol(hare) = 1/2 and Prow(stag) = 1/2, Pcol(hare) = 1/2 in the “Chicken” and “Stag Hunt” games respectively.

In fact, all the possible prior models can be organized as follows:

* 1. Probability of playing “stag” is higher than that of playing “stag” in mixed strategy Nash Equilibrium strategy
  2. Probability of playing “stag” is equal to that of playing “stag” in mixed strategy Nash Equilibrium strategy
  3. Probability of playing “stag” is lower than that of playing “stag” in mixed strategy Nash Equilibrium strategy

It can be inferred that the selected prior models of strategies in the “Chicken” game belong to 1-st and 3-rd classes and in the “Stag Hunt” game belong to 2-nd class. Based on the performance of the strategies predictions are that as follows

1-st against itself - will converge to the solution where both Column and Row Players play “stag”

2-nd against itself - depends on the random actions that strategies will play

3-rd against itself - will converge to the solution where both Column and Row Players play “hare”

1-st against 2-nd - depends on the random action that 2-nd will choose and how much 1-st is close to the boundary

1-st against 3-rd - depends on how much are 1-st and 3-rd close to or far from the boundary

2-nd against 3-rd - depends on the random action that 2-nd will choose and how much 3-rd is close to the boundary