

# CIS 603 – Multi-agent Systems

## Homework #5

Due: Wednesday, 13 Nov 2013

In this assignment, you will track the internal model and compute the behavior of Fictitious Play in self play in two different games.

With paper, pencil/pen, and a calculator, track the internal models and compute the behavior of Fictitious Play in self play for 5 rounds in the two games shown below. After completing the five rounds, make an educated guess about what solutions the algorithms will converge to.

**Show your work.** Note that you will need to define both players' priors. Reason about how the players' priors affect the outcome of the game.

Stag hunt

	stag	hare
stag	4, 4	-1, 3
hare	3, -1	2, 2

Chicken

	swerve	straight
swerve	3, 3	1, 4
straight	4, 1	0, 0