Game-theoretic Modeling

ÜBUNG WS 2019

35. Consider a symmetric game given by following payoff matrix (version of chicken run):

$$A = \begin{array}{c} F & B \\ F & \begin{pmatrix} 0 & 3 \\ 1 & 2 \end{pmatrix}$$

Proof that the strategy profile $((\frac{1}{2}, \frac{1}{2}), (\frac{1}{2}, \frac{1}{2}))$ is evolutionary stable.

36. Compute the evolutionary stable strategies of a symmetric game given by following payoff matrix

$$A = \begin{array}{cc} F & B \\ F & \begin{pmatrix} 2 & 0 \\ 0 & 1 \end{pmatrix}$$

37. Determine the replicator dynamics for the Rock-Paper-Scissors Game

	Rock	Paper	Scissors
Rock	/ 1	0	$a \rightarrow$
Paper	a	1	0
Scissors	$\setminus 0$	a	1 /