

1. Consider the following game

	A	B
A	(0,0)	(5,8)
B	(8,5)	(0,0)

- (a) Find all Nash equilibria.
- (b) Is there an ESS?
- (c) Suppose the game is played following the observation of either a red or a green light lighting up, with probability  $\frac{1}{3}$  and  $\frac{2}{3}$  respectively. Find the extensive form representation of this game. Find the strategic form representation. Find all pure-strategy Nash equilibria.
- (d) Suppose the game is played following simultaneous announcements by both players, where players can announce either  $H$  or  $T$ . What is the highest expected payoff players can achieve in a symmetric equilibrium?
- (e) What do the last two questions tell us about changing the game and what inference might one draw regarding quantum games?