

EE672: Game Theory for Wireless Networks
Homework 1

The following game models two wireless terminals that have to simultaneously select a transmission channel between two different frequency channels: f_1 and f_2 .

If they both select the same frequency, their packets collide and they are both lost. In this case their utility is -1. If they select different channels, their packets are transmitted correctly, so their utility is 1.

- (a) Set-up the game matrix for this normal form (strategic) game and find the Nash equilibrium/equilibria, for this game.
- (b) Find out the Pareto efficient strategy tuples.