# OR 3: Lecture 2 - Normal Form Games

## Recap

In the [previous lecture](Lecture_1-Introduction.html) we discussed:

* Interactive decision making;
* Normal form games;
* Normal form games and representing information sets.

We did this looking at a game called "the battle of the sexes":



Celine and Bob with Information Set

Can we think of a better way of representing this game?

## Normal form games

One other representation for a game is called the **normal form**.

### Definition

A player **normal form game** consists of:

1. A finite set of players;
2. Strategy spaces for the players: ;
3. Payoff functions for the players:

A natrual way of representing a two player normal form game is using a **bi-matrix**: