## Beliefs

Row   Column

| | C1 | C2 | C3 |
|---|---|---|---|
| $R_1$ | 4,1 | 1,1 | 2,5 |
| $R_2$ | 2,2 | 0,0 | 3,3 |
| $R_3$ | 2,5 | 1,1 | 1,4 |

$$P_1 \qquad P_2 \qquad 1-P_1-P_2$$
$$0.2 \qquad 0.2 \qquad 0.6$$

$$\theta_{-R}, \theta_c \qquad \rightarrow \theta_{-i} \in \Delta S_{-i}$$

Theta not row means theta column ...

beliefs are represented by Probability distributions

## Expected Payoff / utility $\rightarrow E$

$$\theta_c = (.2, .2, .6) \qquad\qquad U = \text{utility}$$

$$E(U_R | S_R = R_2, \theta_c) = .2 \cdot 2 + .2 \cdot 0 + .6 \cdot 3 = 2.2$$

↑ IF        ↑ and

$$\theta_R = (.7, 0, .3) \rightarrow E(U_c | S_c = C_1, \theta_R) = .7 \cdot 1 + 0 \cdot 2 + .3 \cdot 5$$
$$= .85$$

$$U_i(S_i, \theta_{-i}) = \sum_{S_{-i} \in S_{-i}} \theta_{-i}(S_{-i}) \cdot U(S_i, S_{-i})$$