CS344M Autonomous Multiagent Systems Spring 2008

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Good Afternoon, Colleagues

Are there any questions?



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- Mixed Nash equilibria?
- What can't game theory simulate?
- What if one player isn't rational?
- Doran's research





• Project progress reports due next week





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- Thoughts on faculty candidate?



Matt Wilson on a multiagent game



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- But most of all, we want to be together
- Propose a payoff matrix

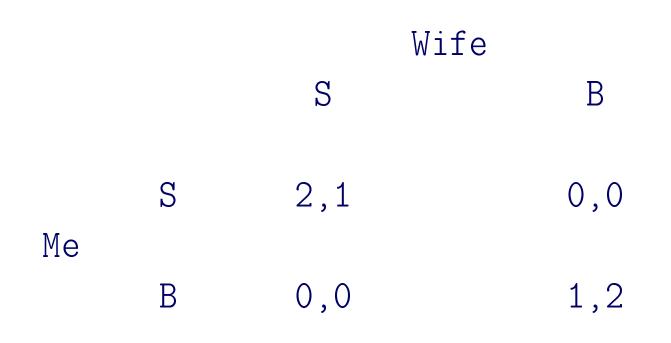


	Wife				
		S	В		
Me	S	2,1	0,0		
Me	В	0,0	1,2		



Correlated Equilibria

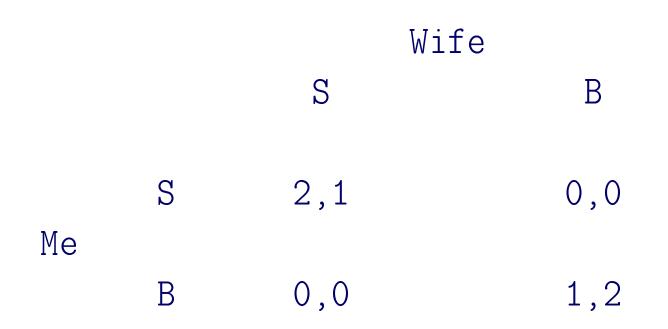
Sometimes mixing isn't enough: Bach/Stravinsky





Correlated Equilibria

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Want only S,S or B,B - 50% each



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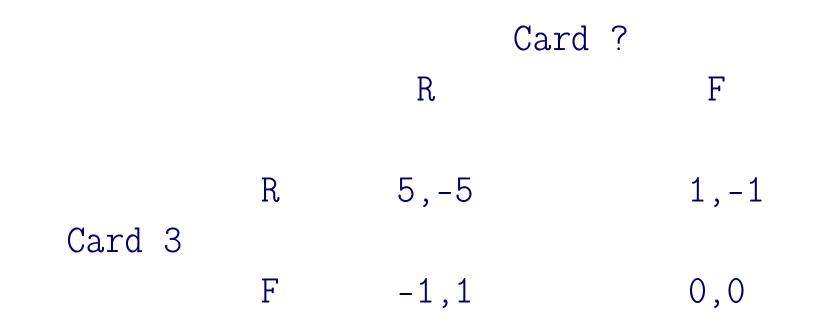
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- When and where?
- What are the Nash equilibria?



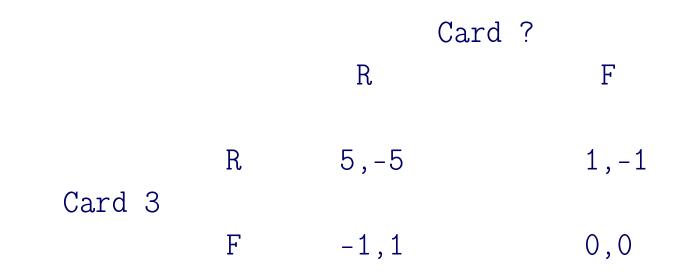
- We each get one of 3 cards: 1,2,3
- If we both fold, we both lose nothing
- If one raises and one folds, the raiser gets 1
- If both raise, the one with the higher card gets 5
- Zero sum



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		Card ?	
		R	F
Card 3	R	5,-5	1,-1
Odra O	F	-1,1	0,0
		Card ?	
		R	F
Card 1	R	-5,5	1,-1
	F	-1,1	0,0



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With more numbers and/or different payoffs, bluffing can be a part of the Nash Equilibrium



			Player	2	
		Action	1	Action 2	
Player 1	Action 1	1,0		3,2	
5	Action 2	2,1		4,0	



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Threats slides





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 Need to do well against some set of agents, never too poorly, and well against yourself.



• Tutorial slides

