

---

# Contents

<b>1</b>	<b>Motivation and Outline</b>	<b>1</b>
<b>2</b>	<b>Basic Concepts of the Theories of Games, Networks and Markov Chains</b>	<b>7</b>
2.1	Notation	7
2.2	Elements of Game Theory	7
2.3	Elements of Network Theory	19
2.4	Elements of the Theory of Markov Chains	22
<b>3</b>	<b>The Network Dilemma Game</b>	<b>27</b>
3.1	Definition	27
3.2	Discussion	30
<b>4</b>	<b>Cooperation in Finitely Repeated Network Dilemma Games</b>	<b>35</b>
4.1	Introduction	36
4.2	Network Dilemma Game with Linking Constraints	40
4.3	Equilibria and Linking-Proof Networks	43
4.4	Cooperation in a Subgame Perfect Equilibrium	53
4.5	Discussion	70
4.6	Conclusion	75
<b>5</b>	<b>Exclusion and Cooperation in Experiments</b>	<b>77</b>
5.1	Introduction	78
5.2	Experimental Design	81
5.3	Experimental Procedures	83
5.4	Predictions	86
5.5	Experimental Results	90
5.6	Social Preferences	101

X      Contents

5.7	Discussion and Conclusion . . . . .	115
<b>6</b>	<b>Dynamics of Partner Choice and Cooperation . . . . .</b>	<b>117</b>
6.1	Introduction . . . . .	118
6.2	Adaptive Play . . . . .	123
6.3	The Basic Process . . . . .	128
6.4	Simulations of the Basic Process . . . . .	135
6.5	Social Preferences . . . . .	144
6.6	Discussion . . . . .	159
6.7	Conclusion . . . . .	167
<b>A</b>	<b>Appendix: Proofs . . . . .</b>	<b>169</b>
A.1	Proofs from Chapter 4 . . . . .	169
A.2	Proofs from Chapter 5 . . . . .	176
A.3	Proofs from Chapter 6 . . . . .	180
<b>B</b>	<b>Appendix: Experimental Instructions . . . . .</b>	<b>185</b>
<b>References . . . . .</b>		<b>191</b>
<b>Index . . . . .</b>		<b>201</b>