



# Contents

	<b>The Contributors</b>	vii
1	<b>Introduction</b> RAYMOND FLOOD AND MICHAEL LOCKWOOD	1
2	<b>Time 'Paradoxes' in Relativity</b> DENNIS SCIAMA	6
3	<b>Space, Time and Space—Time: A Philosopher's View</b> W. H. NEWTON-SMITH	22
4	<b>Big Bangs, Black Holes and 'Time's Arrow'</b> ROGER PENROSE	36
5	<b>Time and Cosmology</b> MICHAEL SHALLIS	63
6	<b>Time and Dispersal: The Second Law</b> P. W. ATKINS	80
7	<b>Time Asymmetry and Quantum Mechanics</b> PAUL DAVIES	99
8	<b>The Open Future</b> J. R. LUCAS	125
9	<b>Causal Loops</b> M. DUMMETT	135
	<b>Glossary</b>	170
	<b>Bibliography</b>	180
	<b>Index</b>	183