

## Contents

	<i>List of Contributors</i>	<i>page vii</i>
1	Introduction NICK HUGGETT, KEIZO MATSUBARA, AND CHRISTIAN WÜTHRICH	1
	<b>Part I Spacetime Emergence</b>	<b>23</b>
2	The Bronstein Hypercube of Quantum Gravity DANIELE ORITI	25
3	Emergence of Time in Loop Quantum Gravity SUDDHASATTWA BRAHMA	53
4	Beyond Standard Inflationary Cosmology ROBERT H. BRANDENBERGER	79
5	What Black Holes Have Taught Us about Quantum Gravity DANIEL HARLOW	105
	<b>Part II Time in Quantum Theories of Gravity</b>	<b>115</b>
6	Space and Time in Loop Quantum Gravity CARLO ROVELLI	117
7	Being and Becoming on the Road to Quantum Gravity; or, the Birth of a Baby Is Not a Baby FAY DOWKER	133
8	Temporal Relationalism LEE SMOLIN	143

vi	<i>Contents</i>	
9	Back to Parmenides HENRIQUE GOMES	176
	<b>Part III Issues of Interpretation</b>	207
10	Why Black Hole Information Loss Is Paradoxical DAVID WALLACE	209
11	Chronic Incompleteness, Final Theory Claims, and the Lack of Free Parameters in String Theory RICHARD DAWID	237
12	Spacetime and Physical Equivalence SEBASTIAN DE HARO	257
13	On the Empirical Consequences of the AdS/CFT Duality RADIN DARDASHTI, RICHARD DAWID, SEAN GRYB, AND KARIM THÉBAULT	284
14	Extending Lewisian Modal Metaphysics from a Specific Quantum Gravity Perspective TIZIANA VISTARINI	304
15	What Can (Mathematical) Categories Tell Us about Spacetime? KO SANDERS	338
	<i>Index</i>	358