'Picturing Quantum Processes is a lively and refreshing romp through the author's diagrammatic and categorical approach to quantum processes. I recommend this book with no lower age limit required!'

Louis Kauffman, University of Illinois

'This book develops from scratch the category theoretic, and diagrammatic, language for quantum theory, especially quantum processes. It is a remarkable achievement: vigorous, crystal-clear, complete –and a delight to read.'

Jeremy Butterfield, University of Cambridge

The unique features of the quantum world are explained in this book through the language of diagrams, setting out an innovative visual method for presenting complex theories. Requiring only basic mathematical literacy this book employs a unique formalism that builds an intuitive understanding of quantum features while eliminating the need for complex calculations. This entirely diagrammatic presentation of quantum theory represents the culmination of 10 years of research, uniting classical techniques in linear algebra and Hilbert spaces with cutting-edge developments in quantum computation and foundations.

Written in an entertaining and user-friendly style and including more than 100 exercises, this book is an ideal first course in quantum theory, foundations, and computation for students from undergraduate to PhD level, as well as an opportunity for researchers from a broad range of fields, from physics to biology, linguistics, and cognitive science, to discover a new set of tools for studying processes and interaction.

Bob Coecke is Professor of Quantum Foundations, Logic and Structures at Oxford University, where he also heads the multi-disciplinary Quantum Group. His pioneering research stretches from categorical quantum mechanics to the compositional structure of natural language meaning, and recent interests include causality and cognitive architecture.

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Prefac	ce	Summary: What to Remember and a second a line and the	page xiii
Intro	duction		3.6
1.1	The P	enguins and the Polar Bear	1
1.2		hat's New?	5
	1.2.1	A New Attitude to Quantum Theory: 'Features'	6
	1.2.2	A New Form of Mathematics: 'Diagrams'	9
	1.2.3	A New Foundation for Physics: 'Process Theories'	11
	1.2.4	A New Paradigm: 'Quantum Picturalism'	13
1.3	Histor	rical Notes and References	15
Guid	e to Rea	ding This Textbook	19
2.1		Are You and What Do You Want?	19
2.2	The M		20
	2.2.1	How Diagrams Evolve in This Book	20
	2.2.2	Hollywood-Style Trailer	22
	2.2.3	Some Intermediate Symbolic Pollution	24
	2.2.4	Summaries, Historical Notes, References, Epigraphs	25
	2.2.5	Starred Headings and Advanced Material Sections	25
2.3	FAQ	Bell Bacy and Ball, Maps	25
Proce	esses as	Diagrams	28
3.1		Processes to Diagrams	29
	3.1.1	Processes as Boxes and Systems as Wires	29
	3.1.2	Process Theories	32
	3.1.3	Diagrams Are Mathematics	35
	3.1.4	Process Equations	38
	3.1.5	Diagram Substitution	41
3.2	Circui	t Diagrams	44
	3.2.1	Parallel Composition	44
	3.2.2	Sequential Composition	45
	3.2.3	Two Equivalent Definitions of Circuits	46
-4			

V

C	0	ni	te	n	ts

	3.2.4	Diagrams Beat Algebra	50
3.3	Functi	ions and Relations as Processes	52
	3.3.1	Sets	53
	3.3.2	Functions	54
	3.3.3	Relations	56
	3.3.4	Functions versus Relations	59
3.4	Specia	al Processes	59
	3.4.1	States, Effects, and Numbers	59
	3.4.2	Saying the Impossible: Zero Diagrams	66
	3.4.3	Processes That Are Equal 'Up to a Number'	68
	3.4.4	Dirac Notation	69
3.5	Summ	ary: What to Remember	72
3.6		ced Material*	74
	3.6.1	Abstract Tensor Systems*	75
	3.6.2	Symmetric Monoidal Categories*	77
	3.6.3	General Diagrams versus Circuits*	80
3.7	Histori	ical Notes and References	81
. .			01
	g Diagra		83
4.1		Caps, and String Diagrams	84
	4.1.1	Separability	85
	4.1.2		88
	4.1.3	8 1	90
	4.1.4	String Diagrams	92
4.2	-	position and Trace	94
		The Transpose	95
	4.2.2	Transposition of Composite Systems	99
	4.2.3	The Trace and Partial Trace	101
4.3	Reflect	ting Diagrams	103
	4.3.1	Adjoints	103
	4.3.2	Conjugates	108
	4.3.3	The Inner Product	113
	4.3.4	Unitarity	117
	4.3.5	Positivity	118
	4.3.6	⊗-Positivity	120
	4.3.7	Projectors	122
4.4	Quantu	Im Features from String Diagrams	125
	4.4.1	A No-Go Theorem for Universal Separability	125
	4.4.2	Two No-Go Theorems for Cloning	129
	4.4.3	As If time Flows Backwards	134
			101

		Contents	vii
	4.4.4	Teleportation	137
4.5	Summa	ary: What to Remember	141
4.6	Advand	ced Material*	145
	4.6.1	String Diagrams in Abstract Tensor Systems*	146
	4.6.2	Dual Types and Self-Duality*	146
	4.6.3	Dagger Compact Closed Categories*	150
4.7	Histori	cal Notes and References	152
Hilbe	rt Space	from Diagrams	154
5.1	Bases a	and Matrices	156
	5.1.1	Basis for a Type	156
	5.1.2	Matrix of a Process	162
	5.1.3	Sums of Processes	167
	5.1.4	Processes from Matrices	172
	5.1.5	Matrices of Isometries and Unitaries	177
	5.1.6	Matrices of Self-Adjoint and Positive Processes	182
	5.1.7	Traces of Matrices	185
5.2	Matrix	Calculus	187
	5.2.1	Sequential Composition of Matrices	187
	5.2.2	Parallel Composition of Matrices	188
	5.2.3	Matrix Form of Cups and Caps	194
	5.2.4	String Diagrams of Matrices	197
	5.2.5	Matrices as Process Theories	198
5.3	Hilbert	t Spaces	200
	5.3.1	Linear Maps and Hilbert Spaces from Diagrams	200
	5.3.2	Positivity from Conjugation	203
	5.3.3	Why Mathematicians Love Complex Numbers	204
	5.3.4	Classical Logic Gates as Linear Maps	210
	5.3.5	The X-Basis and the Hadamard Linear Map	213
	5.3.6	Bell Basis and Bell Maps	218
5.4	Hilbert	t Spaces versus Diagrams	222
	5.4.1	String Diagrams Are Complete for Linear Maps	223
	5.4.2	The Set-Theoretic Definition of Hilbert Spaces	226
5.5	Summ	ary: What to Remember	233
5.6	Advan	ced Material*	238
	5.6.1	Beyond Finite Dimensions*	238
	5.6.2	Categories with Sums and Bases*	240
	5.6.3	Sums in Knot Theory*	242
	5.6.4	Equivalence of Symmetric Monoidal Categories*	243
5.7	Histori	ical Notes and References	249

0			
Co	mi	PV	its
00	100	CI	un

6	Quar	ntum Pro	ocesses		251
	6.1	Pure (Quantum Maps from Doubling		253
		6.1.1	Doubling Generates Probabilities		253
		6.1.2	Doubling Eliminates Global Phases		257
		6.1.3	The Process Theory of Pure Quantum Maps	1.6.2	260
		6.1.4	Things Preserved by Doubling		265
		6.1.5	Things Not Preserved by Doubling		270
	6.2	Quant	um Maps from Discarding		274
		6.2.1	Discarding		275
		6.2.2	Impurity		279
		6.2.3	Weight and Causality for Quantum States		282
		6.2.4	The Process Theory of Quantum Maps		287
		6.2.5	Causality for Quantum Maps		292
		6.2.6	Isometry and Unitarity from Causality		294
		6.2.7	Kraus Decomposition and Mixing		298
		6.2.8	The No-Broadcasting Theorem		305
	6.3	Relativ	vity in Process Theories		309
		6.3.1	Causal Structure		309
		6.3.2	Causality Implies Non-signalling		314
		6.3.3	Causality and Covariance		315
	6.4	Quanti	um Processes		317
		6.4.1	Non-deterministic Quantum Processes		318
		6.4.2	Non-deterministic Realisation of All Quantum Maps		322
		6.4.3	Purification of Quantum Processes		324
		6.4.4	Teleportation Needs Classical Communication		327
		6.4.5	Controlled Processes		329
		6.4.6	Quantum Teleportation in Detail		331
	6.5	Summ	ary: What to Remember		334
	6.6	Advan	ced Material*		337
		6.6.1	Doubling General Process Theories*		338
		6.6.2	Axiomatizing Doubling*		339
		6.6.3	And Now for Something Completely Different*		342
	6.7	Histori	ical Notes and References		343
7	Quan	tum Mea	asurement		345
	7.1	ONB N	Measurements		347
		7.1.1	A Dodo's Introduction to Measurement Devices		347
		7.1.2	Demolition ONB Measurements		350
		7.1.3	Non-demolition ONB Measurements		355
		7.1.4	Superposition and Interference		357
		7.1.5	The Next Best Thing to Observation		360

		Contents		1X
7.2	Measu	rement Dynamics and Quantum Protocols		361
	7.2.1	Measurement-Induced Dynamics I: Backaction		362
	7.2.2	Example: Gate Teleportation		365
	7.2.3	Measurement-Induced Dynamics II: Collapse		366
	7.2.4	Example: Entanglement Swapping		369
7.3	More (General Species of Measurement		371
	7.3.1	Von Neumann Measurements		371
	7.3.2	Von Neumann's Quantum Formalism		377
	7.3.3	POVM Measurements		380
	7.3.4	Naimark and Ozawa Dilation		383
7.4	Tomog	graphy		385
	7.4.1	State Tomography	- 8.6.2 -	385
	7.4.2	Informationally Complete Measurements	8.6.3	388
	7.4.3	Local Tomography = Process Tomography		390
7.5	Summ	ary: What to Remember		392
7.6	Advan	ced Material*		396
	7.6.1	Do Quantum Measurements Even Exist?*		396
	7.6.2	Projectors and Quantum Logic*		399
	7.6.3	Failure of Local Tomography*		401
7.7	Histori	ical Notes and References		402
Pictur	ring Clas	ssical-Quantum Processes		405
8.1	-	cal Systems as Wires		409
	8.1.1	Double versus Single Wires		410
	8.1.2	Example: Dense Coding		413
	8.1.3	Measurement and Encoding		415
	8.1.4	Classical-Quantum Maps		416
	8.1.5	Deleting and Causality		421
8.2		cal Maps from Spiders		423
	8.2.1	Classical Maps		424
	8.2.2	Copying and Deleting		427
	8.2.3	Spiders		437
	8.2.4	If It behaves like a Spider It Is One		444
	8.2.5	All Linear Maps as Spiders + Isometries		446
	8.2.6	Spider Diagrams and Completeness		451
8.3		um Maps from Spiders		453
	8.3.1	Measuring and Encoding as Spiders		454
	8.3.2	Decoherence		459
	8.3.3	Classical, Quantum, and Bastard Spiders		463
	8.3.4	Mixing with Spiders		469
	8.3.5	Entanglement for Impure States		472

Contents

8.4	Measure	ements and Protocols with Spiders		476
	8.4.1	ONB Measurements		476
	8.4.2	Controlled Unitaries		479
	8.4.3	Teleportation		482
	8.4.4	Dense coding	. 724	485
	8.4.5	Entanglement Swapping		486
	8.4.6	Von Neumann Measurements		488
	8.4.7	POVMs and Naimark Dilation		490
8.5	Summa	ry: What to Remember		492
8.6	Advanc	ed Material*		498
	8.6.1	Spiders Are Frobenius Algebras*		498
	8.6.2	Non-commutative Spiders*		502
	8.6.3	Hairy Spiders*		505
	8.6.4	Spiders as Words*		507
8.7	Historic	cal Notes and References		507
Pictur	ing Phase	es and Complementarity		510
9.1		ted Spiders		512
7.1	9.1.1	Unbiasedness and Phase States		512
	9.1.2	Phase Spiders		517
	9.1.2	Phase Spider Fusion		519
	9.1.4	The Phase Group		522
	9.1.4	Phase Gates		524
9.2		bloured Spiders		529
9.4	9.2.1	Complementary Spiders		529
	9.2.1	Complementarity and Unbiasedness		535
	9.2.2			
		The CNOT-Gate from Complementarity		540 543
	9.2.4	'Colours' of Classical Data		
	9.2.5	Complementary Measurements		545
	9.2.6	Quantum Key Distribution		549
0.2	9.2.7	I I J		552
9.3	0	1		557
	9.3.1	C		558
	9.3.2			561
1	9.3.3			562
	9.3.4	The Classical Subgroup		567
	9.3.5	Parity Maps from Spiders		575
0.4	9.3.6	Classifying Strong Complementarity		578
9.4	ZX-Cal			581
	9.4.1	ZX-Diagrams Are Universal		582
	9.4.2	ZX-Calculus for Clifford Diagrams		586
	943	ZX for Dodos: Just Diagrams Nothing Else		591

			Contents	X
		9.4.4	ZX for Pros: Build Your Own Calculus	596
		9.4.5	ZX for the God(esse)s: Completeness	601
		9.4.6	Where We Stand with Full ZX-Calculus	608
	9.5	Summ	ary: What to Remember	610
	9.6	Advan	ced Material*	616
		9.6.1	Strongly Complementary Spiders Are Hopf Algebras*	616
		9.6.2	Strong Complementarity and Normal Forms*	618
	9.7	Histori	ical Notes and References	622
0	Quan	tum The	ory: The Full Picture	624
	10.1		lagrams	625
		10.1.1	Circuit Diagrams	625
		10.1.2		627
		10.1.3		629
		10.1.4	Spider Diagrams	631
		10.1.5	ZX-Diagrams	634
	10.2	The Pr	ocesses	636
		10.2.1	Causality	636
		10.2.2	Process Decomposition and No-Broadcasting	637
		10.2.3	Examples	639
	10.3	The La	WS	645
		10.3.1	Complementarity	645
		10.3.2	Strong Complementarity	648
		10.3.3	ZX-Calculus	650
	10.4	Historie	cal Notes and References	653
1	Quan	tum Four	ndations	655
	11.1		m Non-locality	655
		11.1.1	Refinements of Quantum Theory	656
		11.1.2	GHZ-Mermin Scenarios	658
		11.1.3	Drawing a Contradiction	660
	11.2	Quantu	m-like Process Theories	661
		11.2.1	Complementarity in relations	662
		11.2.2	Spekkens' Toy Quantum Theory	663
		11.2.3	Phases in spek	668
		11.2.4	ZX-Calculus for <i>spek</i>	671
		11.2.5	Non-locality in spek?	674
	11.3	Summa	ry: What to Remember	676
	11.4	Historic	cal Notes and References	677
2	Quant	tum Com	putation	679
	12.1		cuit Model	680
		12.1.1	Quantum Computing as ZX-Diagrams	681
				001

Content	S
	-

		12.1.2	Building Quantum Gates as ZX-D	iagrams	684
		12.1.3	Circuit Universality		691
	12.2	Quantu	m Algorithms		698
		12.2.1	A Quantum Oracle's (False?) Mag	ic an addition of the second second	698
		12.2.2	The Deutsch–Jozsa Algorithm	6. Advanced Material*	702
		12.2.3	Quantum Search		707
		12.2.4	The Hidden Subgroup Problem		712
	12.3	Measur	ement-Based Quantum Computatio	7 Historical Notes and Rn	719
		12.3.1	Graph States and Cluster States		721
		12.3.2	Measuring Graph States		722
		12.3.3	Feed-Forward		724
		12.3.4	Feed-Forward with Classical Wire	S	727
		12.3.5	Universality		730
	12.4	Summa	ry: What to Remember		734
	12.5	Historie	cal Notes and References		735
2	0	Deer		- donation - All	737
3	-	um Reso			
	13.1		ce Theories		738
		13.1.1	Free Processes		739
		13.1.2	Comparing Resources		741
	12.0		Measuring Resources		744
	13.2	Purity '			746
		13.2.1	Comparing Purity		747
	12.2		Measuring (Im)purity		756
	13.3	-	lement Theory		757
		13.3.1	LOCC Entanglement		757
		13.3.2	SLOCC Entanglement		770
		13.3.3	Exploding Spiders		776
	10.4	13.3.4			781
	13.4		ary: What to Remember		784
	13.5	Histori	cal Notes and References		788
4	Quan	tomatic			790
	14.1	Taking	Quantomatic for a Spin		791
	14.2	-	s: Replacing the 'Dot, Dot, Dot'		797
	14.3				800
	14.4				803
	Appen		ne Notations		804
	Referen	nces			806
	Index				822