

Contents

Contextuality and Correlations

Quantum Correlations: Challenging the Tsirelson Bound	3
<i>Alexei Grinbaum</i>	
Contextuality-by-Default: A Brief Overview of Ideas, Concepts, and Terminology.	12
<i>Ehtibar N. Dzhafarov, Janne V. Kujala, and Victor H. Cervantes</i>	
Contextuality and the Weak Axiom in the Theory of Choice	24
<i>William Zeng and Philipp Zahn</i>	
Measuring Observable Quantum Contextuality	36
<i>Jose Acacio de Barros, Ehtibar N. Dzhafarov, Janne V. Kujala, and Gary Oas</i>	

Fundamentals

Age and Time Operator of Evolutionary Processes	51
<i>Ioannis Antoniou, Ilias Gialampoukidis, and E. Ioannidis</i>	
Can Bohmian Quantum Information Help us to Understand Consciousness? . . .	76
<i>Paavo Pyllkkänen</i>	
Non-Classical Probabilities from Pilot Wave Models	88
<i>Thomas Filk</i>	
Why Linear? An Illustration Using a Geometric Model of Quantum Interaction	101
<i>Paul Baird</i>	
On Incompatible Descriptions of Systems Across Scales of Granularity	113
<i>Harald Atmanspacher and Peter beim Graben</i>	

Applications in Decision Making

The Relation Between Acausality and Interference in Quantum-Like Bayesian Networks	129
<i>Catarina Moreira and Andreas Wichert</i>	
Do Preferences and Beliefs in Dilemma Games Exhibit Complementarity? . . .	142
<i>Ismael Martínez-Martínez, Jacob Denolf, and Albert Barque-Duran</i>	

Complementarity

Generalized Quantum Theory, Contextual Emergence and Non-Hierarchic Alternatives	157
<i>Hartmann Römer</i>	
Complementarity in Psychophysics	168
<i>Pierre Uzan</i>	
A Compositional Explanation of the ‘Pet Fish’ Phenomenon	179
<i>Bob Coecke and Martha Lewis</i>	

Social and Cultural Applications

Conceptual Machinery of the Mythopoetic Mind: Attis, A Case Study.	195
<i>Sándor Darányi and Peter Wittek</i>	
Preventing (Another) Lubitz: The Thermodynamics of Teams and Emotion . . .	207
<i>W.F. Lawless</i>	
Ideologies and Their Points of View	216
<i>Kirsty Kitto and Dominic Widdows</i>	

Semantic Representations

Graded Semantic Vectors: An Approach to Representing Graded Quantities in Generalized Quantum Models	231
<i>Dominic Widdows and Trevor Cohen</i>	
Embedding Probabilities in Predication Space with Hermitian Holographic Reduced Representations	245
<i>Trevor Cohen and Dominic Widdows</i>	
Modelling Cued-Target Recall Using Quantum Inspired Models of Target Activation	258
<i>David Galea and Peter Bruza</i>	

Operators and Operator Valued Measures

Real-Orthogonal Projections as Quantum Pseudo-Logic	275
<i>Marjan Matvejchuk and Dominic Widdows</i>	
Applying POVM to Model Non-orthogonality in Quantum Cognition	284
<i>Mojtaba Aliakbarzadeh and Kirsty Kitto</i>	

Author Index	295
-------------------------------	-----

Quantum Interaction

9th International Conference, QI 2015, Filzbach,
Switzerland, July 15-17, 2015, Revised Selected Papers
Atmanspacher, H.; Filk, Th.; Pothos, E. (Eds.)
2016, X, 295 p. 51 illus. in color., Softcover
ISBN: 978-3-319-28674-7