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Altri autori (Persone)	ChildsAndrew, Ph.D. MoscaMichele <1971->
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Soggetti	User interfaces (Computer systems) Human-computer interaction Computer programming Coding theory Information theory Computer science Algorithms User Interfaces and Human Computer Interaction Programming Techniques Coding and Information Theory Theory of Computation
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Solutions to the Hidden Subgroup Problem on Some Metacyclic Groups -- Quantum Online Memory Checking -- On the Structure of Protocols for Magic State Distillation -- Statistically-Hiding Quantum Bit Commitment from Approximable-Preimage-Size Quantum One-Way Function -- On the Security and Degradability of Gaussian Channels -- Universal Quantum Computation with a Non-Abelian Topological Memory -- Conditions for the Approximate Correction of Algebras --

Optimal State Merging without Decoupling -- Optimal Trading of
Classical Communication, Quantum Communication, and Entanglement
-- On the Power of the PPT Constraint in the Symmetric Extensions Test
for Separability.

Sommario/riassunto

This book constitutes the thoroughly refereed post-workshop proceedings of the 4th Workshop on Theory of Quantum Computation, Communication, and Cryptography, TQC 2009, held in Waterloo, Canada, in May 2009. The 10 revised papers presented were carefully selected during two rounds of reviewing and improvement. The papers present current original research and focus on theoretical aspects of quantum computation, quantum communication, and quantum cryptography, which are part of a larger interdisciplinary field embedding information science in a quantum mechanical framework. Topics addressed are such as quantum algorithms, models of quantum computation, quantum complexity theory, simulation of quantum systems, quantum cryptography, quantum communication, quantum estimation and measurement, quantum noise, quantum coding theory, fault-tolerant quantum computing, and entanglement theory.
