

1. Record Nr.	UNINA9910484453503321
Titolo	Theory of Quantum Computation, Communication and Cryptography : 4th Workshop, TQC 2009, Waterloo, Canada, May 11-13. Revised Selected Papers / / edited by Andrew Childs, Michele Mosca
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2009
ISBN	1-280-38336-4 9786613561282 3-642-10698-6
Edizione	[1st ed. 2009.]
Descrizione fisica	1 online resource (IX, 121 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5906
Altri autori (Persone)	ChildsAndrew, Ph.D. MoscaMichele <1971->
Disciplina	004n/a
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
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
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.