

1. Record Nr.	UNINA9910788662603321
Titolo	Quantum computation and information : AMS Special Session Quantum Computation and Information, January 19-21, 2000, Washington, D.C. // Samuel J. Lomonaco, Jr., Howard E. Brandt, editors
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , [2002] ©2002
ISBN	0-8218-7895-6 0-8218-2140-7
Descrizione fisica	1 online resource (322 p.)
Collana	Contemporary mathematics, ; 305 , 0271-4132
Disciplina	004.1/4
Soggetti	Quantum computers
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Contents -- Preface -- Gilles Brassard Awarded Pot de Vin Prize -- List of Participants -- Space searches with a quantum robot -- Perturbation theory and numerical modeling of quantum logic operations with a large number of qubits -- Inconclusive rate with a positive operator valued measure -- 1. Introduction -- 2. Inconclusive rates comparison -- 3. Disturbed inconclusive rate -- 4. Consistency -- 5. Conclusion -- 6. Acknowledgements -- References -- Quantum amplitude amplification and estimation -- Manipulating the entanglement of one copy of a two-particle pure entangled state -- Geometric algebra in quantum information processing -- Quantum computing and the Jones polynomial -- 1. Introduction -- 2. Dirac Brackets -- 3. Braiding, Projectors and the Temperley Lieb Algebra -- 4. The Bracket Polynomial -- 5. Knot Amplitudes -- 6. Quantum Computing -- 7. Summary -- References -- Quantum hidden subgroup algorithms: A mathematical perspective -- Part 1. Preamble -- 1. Introduction -- 2. An example of Shor's quantum factoring algorithm -- 3. Definition of the hidden subgroup problem (HSP) and hidden subgroup algorithms (HSAs) -- Part 2. Algebraic Preliminaries -- 4. The Character Group -- 5. Fourier analysis on a finite abelian group -- 6. Implementation issues: Group algebras as Hilbert spaces -- Part 3. QRandl?(): The Progenitor of All QHSAs -- 7. Implementing

Probl? (X) with quantum subroutine QRANDI?() -- Part 4. Vintage Simon Algorithms -- 8. Properties of the probability distribution Probl? (X) when I? has a hidden subgroup -- 9. A Markov process MI? induced by Probl? -- A proof that measured data and equations of quantum mechanics can be linked only by guesswork.
