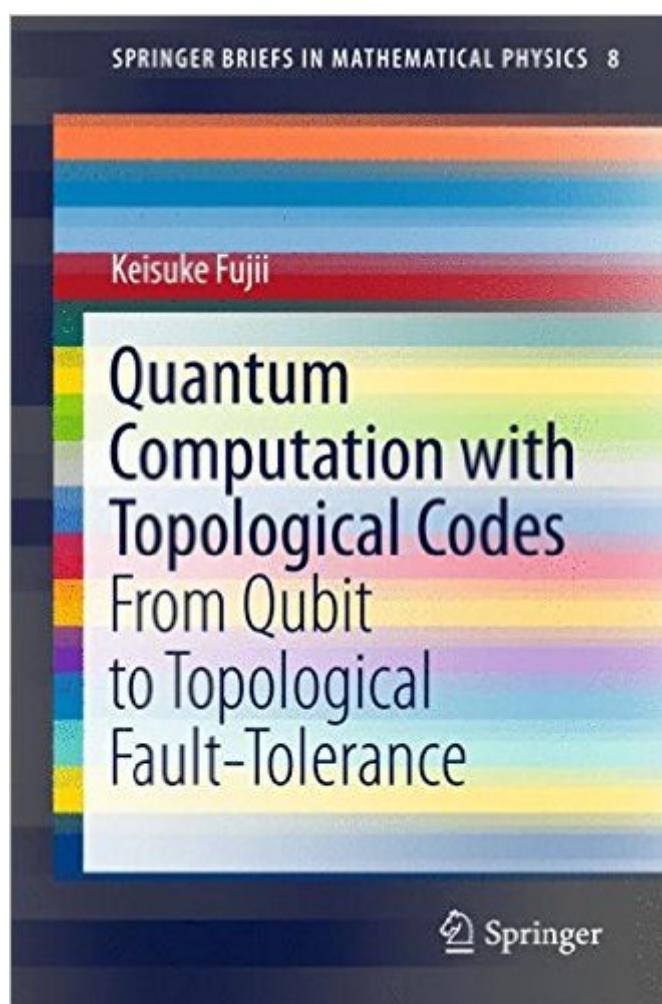


The book was found

Quantum Computation With Topological Codes: From Qubit To Topological Fault-Tolerance (SpringerBriefs In Mathematical Physics)



Synopsis

This book presents a self-consistent review of quantum computation with topological quantum codes. The book covers everything required to understand topological fault-tolerant quantum computation, ranging from the definition of the surface code to topological quantum error correction and topological fault-tolerant operations. The underlying basic concepts and powerful tools, such as universal quantum computation, quantum algorithms, stabilizer formalism, and measurement-based quantum computation, are also introduced in a self-consistent way. The interdisciplinary fields between quantum information and other fields of physics such as condensed matter physics and statistical physics are also explored in terms of the topological quantum codes. This book thus provides the first comprehensive description of the whole picture of topological quantum codes and quantum computation with them.

Book Information

Series: SpringerBriefs in Mathematical Physics (Book 8)

Paperback: 138 pages

Publisher: Springer; 1st ed. 2015 edition (January 13, 2016)

Language: English

ISBN-10: 9812879951

ISBN-13: 978-9812879950

Product Dimensions: 6.1 x 0.4 x 9.2 inches

Shipping Weight: 12.6 ounces (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #2,419,682 in Books (See Top 100 in Books) #199 in Books > Computers & Technology > Hardware & DIY > Mainframes & Minicomputers #1829 in Books > Science & Math > Physics > Mathematical Physics #1996 in Books > Science & Math > Physics > Quantum Theory

[Download to continue reading...](#)

Quantum Computation with Topological Codes: From Qubit to Topological Fault-Tolerance (SpringerBriefs in Mathematical Physics) Practical Decision Making: An Introduction to the Analytic Hierarchy Process (AHP) Using Super Decisions V2 (SpringerBriefs in Operations Research) It's Not Over: Getting Beyond Tolerance, Defeating Homophobia, and Winning True Equality Ending Zero Tolerance: The Crisis of Absolute School Discipline (Families, Law, and Society) Optical Properties of Bismuth-Based Topological Insulators (Springer Theses) Evolutionary Computation in

Gene Regulatory Network Research (Wiley Series in Bioinformatics) Introduction to Computation and Programming Using Python: With Application to Understanding Data (MIT Press) Quantifying Life: A Symbiosis of Computation, Mathematics, and Biology Ferguson's Fault Lines: The Race Quake That Rocked a Nation DEWALT Plumbing Code Reference: Based on the 2015 International Plumbing and Residential Codes (DEWALT Series) California Family Laws and Rules, 2016 ed. (California Desktop Codes) Louisiana Code of Evidence 2016 (Codes of Louisiana) The Freemasons: Unlocking the 1000-Year-Old Mysteries of the Brotherhood: The Masonic Rituals, Codes, Signs and Symbols Explained with Over 200 Photographs and Illustrations QUANTUM SELF HYPNOSIS STOP SMOKING NOW: Hypnosis Script & Inductions Included! (Quantum Self Hypnosis Singles Book 2) Neither Physics nor Chemistry: A History of Quantum Chemistry (Transformations: Studies in the History of Science and Technology) Fundamentals of Physics II: Electromagnetism, Optics, and Quantum Mechanics: 2 (The Open Yale Courses Series) Advanced Physics of Electron Transport in Semiconductors and Nanostructures (Graduate Texts in Physics) Quantum Orchestra: distorting the notes of reality Bananaworld: Quantum Mechanics for Primates Containment (Quantum Law Book 1)

[Dmca](#)