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| Descrizione fisica | 1 online resource (215 p.) |
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| | Quantum groups |
| | Quantum field theory |
| | Quantum gravity |
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| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Preface; Contents; 1. Quantization of Discretized Gauge Theories; 2. Topology: Decomposition of Manifolds; 3. Categories and Diagrams; 4. Representation Theory: Groups & Hopf Algebras; 5. Cellular Gauge Theory; 6. Topological Quantum Field Theory; 7. Related Constructions; 8. Applications to Lattice Models and Quantum Gravity; References; Index |
| Sommario/riassunto | This book provides an introduction to topological quantum field theory as well as discrete gauge theory with quantum groups. In contrast to much of the existing literature, the present approach is at the same time intuitive and mathematically rigorous, making extensive use of suitable diagrammatic methods. It provides a highly unified description of lattice gauge theory, topological quantum field theory and models of quantum (super)gravity. The reader is thus in a unique position to understand the relations between these subjects as well as the underlying groundwork. |