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| Record Nr. | UNIORUON00425962 |
| Autore | BAILLY, Auguste |
| Titolo | Racine / Auguste Bailly |
| Pubbl/distr/stampa | Paris, : Fayard, c1949 |
| Descrizione fisica | 392 p. ; 19 cm. |
| Disciplina | 844 |
| Soggetti | RACINE JEAN |
| Lingua di pubblicazione | Francese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |

2. 

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| Record Nr. | UNINA9910438157903321 |
| Autore | Hall Brian C. |
| Titolo | Quantum Theory for Mathematicians / / by Brian C. Hall |
| Pubbl/distr/stampa | New York, NY : , : Springer New York : , : Imprint : Springer, , 2013 |
| ISBN | 9781489993625 |
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| Descrizione fisica | XVI, 554 p. : gráf. ; ; 24 cm |
| Collana | Graduate Texts in Mathematics, , 0072-5285 ; ; 267 |
| Disciplina | 530.12 |
| Soggetti | Mathematical physics |
| | Quantum theory |
| | Functional analysis |
| | Topological groups |
| | Lie groups |
| | Physics |
| | Mathematical Physics |
| | Mathematical Applications in the Physical Sciences |
| | Quantum Physics |
| | Functional Analysis |
| | Topological Groups, Lie Groups |
| | Mathematical Methods in Physics |

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| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Incluye referencias bibliográficas (p. 545-548) e índice |
| Nota di contenuto | 1 The Experimental Origins of Quantum Mechanics -- 2 A First Approach to Classical Mechanics -- 3 A First Approach to Quantum Mechanics -- 4 The Free Schrödinger Equation -- 5 A Particle in a Square Well -- 6 Perspectives on the Spectral Theorem -- 7 The Spectral Theorem for Bounded Self-Adjoint Operators: Statements -- 8 The Spectral Theorem for Bounded Sef-Adjoint Operators: Proofs -- 9 Unbounded Self-Adjoint Operators -- 10 The Spectral Theorem for Unbounded Self-Adjoint Operators -- 11 The Harmonic Oscillator -- 12 The Uncertainty Principle -- 13 Quantization Schemes for Euclidean Space -- 14 The Stone–von Neumann Theorem -- 15 The WKB Approximation -- 16 Lie Groups, Lie Algebras, and Representations -- 17 Angular Momentum and Spin -- 18 Radial Potentials and the Hydrogen Atom -- 19 Systems and Subsystems, Multiple Particles -- V Advanced Topics in Classical and Quantum Mechanics -- 20 The Path-Integral Formulation of Quantum Mechanics -- 21 Hamiltonian Mechanics on Manifolds -- 22 Geometric Quantization on Euclidean Space -- 23 Geometric Quantization on Manifolds -- A Review of Basic Material -- References. - Index. |
| Sommario/riassunto | Although ideas from quantum physics play an important role in many parts of modern mathematics, there are few books about quantum mechanics aimed at mathematicians. This book introduces the main ideas of quantum mechanics in language familiar to mathematicians. Readers with little prior exposure to physics will enjoy the book's conversational tone as they delve into such topics as the Hilbert space approach to quantum theory; the Schrödinger equation in one space dimension; the Spectral Theorem for bounded and unbounded self-adjoint operators; the Stone–von Neumann Theorem; the Wentzel–Kramers–Brillouin approximation; the role of Lie groups and Lie algebras in quantum mechanics; and the path-integral approach to quantum mechanics. The numerous exercises at the end of each chapter make the book suitable for both graduate courses and independent study. Most of the text is accessible to graduate students in mathematics who have had a first course in real analysis, covering the basics of L2 spaces and Hilbert spaces. The final chapters introduce readers who are familiar with the theory of manifolds to more advanced topics, including geometric quantization. |