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Titolo	Mathematical theory of Feynman path integrals // Sergio Albeverio, Raphael Hoegh-Krohn
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ISBN	3-540-38250-X
Edizione	[1st ed. 1976.]
Descrizione fisica	1 online resource (X, 186 p.)
Collana	Lecture notes in mathematics (Springer-Verlag) ; ; 523
Classificazione	81Q30
Disciplina	515.353
Soggetti	Differential equations, Partial Feynman integrals Path integrals
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The fresnel integral of functions on a separable real Hilbert space -- The Feynman path integral in potential scattering -- The fresnel integral relative to a non singular quadratic form -- Feynman path integrals for the anharmonic oscillator -- Expectations with respect to the ground state of the harmonic oscillator -- Expectations with respect to the Gibbs state of the harmonic oscillator -- The invariant quasi-free states -- The Feynman history integrals for the relativistic quantum boson field.
Sommario/riassunto	Feynman path integrals integrals, suggested heuristically by Feynman in the 40s, have become the basis of much of contemporary physics, from non relativistic quantum mechanics to quantum fields, including gauge fields, gravitation, cosmology. Recently ideas based on Feynman path integrals have also played an important role in areas of mathematics like low dimensional topology and differential geometry, algebraic geometry, infinite dimensional analysis and geometry, and number theory. The 2nd edition of LNM 523 is based on the two first authors' mathematical approach of this theory presented in its 1st edition in 1976. To take care of the many developments which have occurred since then, an entire new chapter about the current forefront of research has been added. Except for this new chapter, the basic

material and presentation of the first edition was maintained, a few misprints have been corrected. At the end of each chapter the reader will also find notes with further bibliographical information.

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