

1. Record Nr.	UNISA996466678403316
Autore	Graham Noah
Titolo	Spectral Methods in Quantum Field Theory [[electronic resource] /] / by Noah Graham, Markus Quandt, Herbert Weigel
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2009
ISBN	3-642-00139-4
Edizione	[1st ed. 2009.]
Descrizione fisica	1 online resource (XI, 182 p. 30 illus.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 777
Classificazione	UD 8220 UO 4000
Disciplina	530.143
Soggetti	Elementary particles (Physics) Quantum field theory Quantum physics Physics Elementary Particles, Quantum Field Theory Quantum Physics Numerical and Computational Physics, Simulation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Review of Scattering Theory -- Quantum Field Theory and the Spectral Method -- Applications in One Space Dimension -- Spectral Analysis of Charges -- Hedgehog Configurations in = 3+1 -- Boundary Conditions and Casimir Forces -- String-Type Configurations -- Quantum Corrections to -Balls.
Sommario/riassunto	This concise text introduces techniques from quantum mechanics, especially scattering theory, to compute the effects of an external background on a quantum field in general, and on the properties of the quantum vacuum in particular. This approach can be successfully used in an increasingly large number of situations, ranging from the study of solitons in field theory and cosmology to the determination of Casimir forces in nano-technology. The method introduced and applied in this book is shown to give an unambiguous connection to perturbation theory, implementing standard renormalization conditions even for non-perturbative backgrounds. It both gives new theoretical insights,

for example illuminating longstanding questions regarding Casimir stresses, and also provides an efficient analytic and numerical tool well suited to practical calculations. Last but not least, it elucidates in a concrete context many of the subtleties of quantum field theory, such as divergences, regularization and renormalization, by connecting them to more familiar results in quantum mechanics. While addressed primarily at young researchers entering the field and nonspecialist researchers with backgrounds in theoretical and mathematical physics, introductory chapters on the theoretical aspects of the method make the book self-contained and thus suitable for advanced graduate students.

2. Record Nr.	UNIORUON00442209
Autore	ITALIA. Ministero degli Affari Esteri. Direzione Centrale degli Affari Coloniali
Titolo	1: Raccolta / Ministero degli affari esteri, Direzione centrale degli affari coloniali
Pubbl/distr/stampa	Roma, : Tipografia del Ministero degli affari esteri, 1906
Descrizione fisica	797 p. ; 24 cm.
Lingua di pubblicazione	Italiano Inglese Francese
Formato	Materiale a stampa
Livello bibliografico	Monografia
