

1. Record Nr.	UNINA9910455630803321
Autore	Smit Jan <1943->
Titolo	Introduction to quantum fields on a lattice : 'a robust mate' / / Jan Smit [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2002
ISBN	9780511020783 0-511-14814-3 0-511-58397-4 0-511-02078-3
Descrizione fisica	1 online resource (xii, 271 pages) : digital, PDF file(s)
Collana	Cambridge lecture notes in physics ; ; 15
Disciplina	530.14/3
Soggetti	Quantum field theory Lattice theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references (p. 261-266) and index.
Nota di contenuto	QED, QCD, and confinement -- Scalar field -- Path-integral and lattice regularization -- Path integral in quantum mechanics -- Regularization by discretization -- Analytic continuation to imaginary time -- Spectrum of the transfer operator -- Latticeization of the scalar field -- Transfer operator for the scalar field -- Fourier transformation on the lattice -- Free scalar field -- Particle interpretation -- Back to real time -- O(n) models -- Goldstone bosons -- O(n) models as spin models -- Phase diagram and critical line -- Weak-coupling expansion -- Renormalization -- Renormalization-group beta functions -- Hopping expansion -- Luscher-Weisz solution -- Numerical simulation -- Real-space renormalization group and universality -- Universality at weak coupling -- Triviality and the Standard Model -- Gauge field on the lattice -- QED action -- QCD action -- Lattice gauge field -- Gauge-invariant lattice path integral -- Compact and non-compact Abelian gauge theory -- Hilbert space and transfer operator -- The kinetic-energy operator -- Hamiltonian for continuous time -- Wilson loop and Polyakov line -- U(1) and SU(n) gauge theory -- Potential at weak coupling -- Asymptotic freedom -- Strong-coupling expansion -- Potential at strong coupling -- Confinement versus screening --

Glueballs -- Coulomb phase, confinement phase -- Mechanisms of confinement -- Scaling and asymptotic scaling, numerical results -- Fermions on the lattice -- Naive discretization of the Dirac action -- Species doubling -- Wilson's fermion method.

### Sommario/riassunto

This book provides a concrete introduction to quantum fields on a lattice: a precise and non-perturbative definition of quantum field theory obtained by replacing continuous space-time by a discrete set of points on a lattice. The path integral on the lattice is explained in concrete examples using weak and strong coupling expansions. Fundamental concepts such as 'triviality' of Higgs fields and confinement of quarks and gluons into hadrons are described and illustrated with the results of numerical simulations. The book also provides an introduction to chiral symmetry and chiral gauge theory, as well as quantized non-abelian gauge fields, scaling and universality. Based on the lecture notes of a course given by the author, this book contains many explanatory examples and exercises, and is suitable as a textbook for advanced undergraduate and graduate courses.

### 2. Record Nr.

Autore

UNINA9910715018003321

Titolo

Lintner Bertil  
The United Wa State Army and Burma's peace process / / Bertil Lintner

Pubbl/distr/stampa

Washington, DC : , : United States Institute of Peace, , 2019  
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Descrizione fisica

1 online resource (24 pages) : color illustrations, one color map

Collana

Peaceworks ; ; no. 147

Soggetti

Wa (Asian people)  
Paramilitary forces - Burma  
Peace-building - Burma  
Drug traffic - Burma  
Drug traffic  
Ethnic relations  
Paramilitary forces  
Peace-building  
Burma Ethnic relations  
Burma

Lingua di pubblicazione

Inglese

Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"April 2019."
Nota di bibliografia	Includes bibliographical references (pages 23-24).
Nota di contenuto	Introduction. -- Wo are the Wa? -- Communism. -- Drug trafficking. -- The UWSP UWSA, and their allies. -- The UWSP and China's role in the peace process. -- Conclusion and policy recommendations.
Sommario/riassunto	The United Wa State Army, a force of some twenty-thousand fighters, is the largest of Burma's ethnic armed organizations. It is also the best equipped, boasting modern and sophisticated Chinese weaponry, and operates a formidable drug empire in the Golden Triangle region. This report examines the history of the Wa people, the United Wa State Army's long-standing political and military ties to China, and the Wa's role in Burma's fragile peace process.