

1. Record Nr.	UNINA9910785093403321
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Titolo	Spatio-temporal chaos and vacuum fluctuations of quantized fields [[electronic resource] /] / Christian Beck
Pubbl/distr/stampa	New Jersey, : World Scientific, c2002
ISBN	981-277-823-3
Descrizione fisica	1 online resource (292 p.)
Collana	Advanced series in nonlinear dynamics ; ; 21
Disciplina	530.14/3
Soggetti	Coupled map lattices Quantum field theory Stochastic processes String models Chaotic behavior in systems Statistical mechanics Particles (Nuclear physics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 253-266) and index.
Nota di contenuto	Contents ; Preface ; Introduction ; Chapter 1 Chaotic quantization of field theories ; 1.1 Stochastic quantization ; 1.2 Dynamical generation of the noise ; 1.3 The free Klein-Gordon field with chaotic noise ; 1.4 * Chaotic quantization in momentum space 1.5 * Gauge fields with chaotic noise 1.6 Distinguished properties of Tchebyscheff maps ; 1.7 * Graph theoretical method ; 1.8 * Perturbative approach ; Chapter 2 Chaotic strings ; 2.1 Motivation for chaotic strings ; 2.2 Anti- integrable limit of a continuum oN+1-theory 2.3 Possible generalizations 2.4 Yet another way to derive the chaotic string ; 2.5 Symmetry properties ; 2.6 Stability properties ; 2.7 Fixed points ; 2.8 * Spatio-temporal patterns ; Chapter 3 Vacuum energy of chaotic strings

; 3.1 Self energy of the $N = 3$ string
 3.2 Self energy of the $N = 2$ string
 energy for general N ; 3.3 Self
 chaotic strings ; 3.4 Interaction energy of
 ; 3.5 * Double strings
 ; 3.6 * Rotating strings ; Chapter 4 Phase transitions
 and spontaneous symmetry breaking
 ; 4.1 Some general remarks on phase transitions
 4.2 Vacuum expectation on 1-dimensional lattices
 4.3 * Real scalar field on d -dimensional lattices
 ; 4.4 * Complex scalar field with $U(1)$ symmetry
 ; 4.5 * Chaotic Higgs field with $SU(2)$ symmetry
 ; Chapter 5 Stochastic interpretation of the uncertainty relation
 5.1 Fluctuations of momenta and positions

Sommario/riassunto

"This book deals with new applications for coupled map lattices in
 quantum field theories and elementary particle physics"--P. xiii.