1. Record Nr. UNISA996466823103316

Titolo	Mathematical Problems in Theoretical Physics [[electronic resource]] : International Conference Held in Rome, June 6–15, 1977 / / edited by G. Dell-Antonio, S. Doplicher, R. Jona-Lasinio
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1978
ISBN	3-540-35811-0
Edizione	[1st ed. 1978.]
Descrizione fisica	1 online resource (VI, 442 p. 1 illus.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 80
Disciplina	530.15
Soggetti	Physics Mathematical physics Mathematical Methods in Physics Mathematical Applications in the Physical Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Lattice instantons: What they are and why they are important -- Gauge fields on the lattice -- Lattice gauge theories -- Some frontiers in constructive quantum field theory and equilibrium statistical mechanics -- New proofs of long range order -- Number of phases in one component ferromagnets -- A survey of local cohomology -- Operator algebras and statistical mechanics -- Foundations of equilibrium quantum statistical mechanics -- Unbounded derivations of C*-algebras and corresponding dynamics -- to the flow of weights on factors of type III -- The von Neumann algebra of a foliation -- Nuclearity and the C*-algebraic flip -- On the Connes spectrum of simple C*-dynamical systems -- Quantum field theory of massless particles and scattering theory -- Scattering theory in quantum mechanics and asymptotic completeness -- Static solitons in more than one dimension -- Geometry of Yang-Mills fields -- Periodic solitons and algebraic geometry -- Yang--Mills equations as inverse scattering problem -- Nonlinear evolution equations solvable by the inverse spectral transform -- Quantization of particle-like solutions in field theory -- Topics in infinite dimensional analysis -- Mathematical foundations of the renormalization group method in statistical physics

-- On the renormilization group for the hierarchical model -- Fluctuationes in Curie-Weiss exemplis -- On the problem of the mathematical foundation of the Gibbs postulate ie classical statistical mechanics -- Dynamical systems with turbulent behavior -- Generic properties of Navier-Stokes equations -- A limit theorem for turbulent diffusion -- Many particle scattering aitlitudes -- A Remark on equations of motion in asymptotically free theories -- Short-distance expansion for products of current-like operators -- The use of exterior forms in field theory -- On extensions of flows in the presence of sets of singularities -- On the uniqueness of the equilibrium state for plane rotators -- A geometric approach to the solution of conformal invariant field equations -- Stability, detailed balance and KMS condition for quantum systems -- Stochasticity and irreversibility in infinite mechanical systems -- Why the KMS states? -- A comment to the talk by E. Seiler.