

1. Record Nr.	UNISA996466715503316
Titolo	Differential Geometry, Group Representations, and Quantization [[electronic resource] /] / edited by Jörg-Dieter Hennig, Wolfgang Lücke, Jiri Tolar
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1991
ISBN	3-540-46473-5
Edizione	[1st ed. 1991.]
Descrizione fisica	1 online resource (XI, 280 p.)
Collana	Lecture Notes in Physics, , 0075-8450 ; ; 379
Disciplina	530.1/5636
Soggetti	Physics Quantum computers Spintronics Quantum physics Differential geometry Mathematical Methods in Physics Numerical and Computational Physics, Simulation Quantum Information Technology, Spintronics Quantum Physics Differential Geometry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Global differential geometric methods in elasticity and hydrodynamics -- $GL(n, ?)$, tetrads and generalized space-time dynamics -- On boundary conditions for Yang-Mills fields in spatially bounded domains -- Parallel transport of phases -- An alternative approach to the quantization of linear relativistic field equations -- A lattice approximation of the dirac equation -- Some hidden aspects of hidden symmetry -- A baryon standard model for electroweak and strong interactions -- Is the physical vacuum really Lorentz-invariant? -- Quantization, coherent states and diffeomorphism groups -- Borel quantization and the origin of topological effects in quantum mechanics -- Symmetries of quantum group coupling coefficients -- Symmetry groups and spectrum generating groups -- Spectrum and

character formulae of $so(3, 2)$ unitary representations -- Quantum theory of single events -- Symmetry, entropy and complexity -- Steps in the philosophy of quantum theory.

Sommario/riassunto

Differential geometry and analytic group theory are among the most powerful tools in mathematical physics. This volume presents review articles on a wide variety of applications of these techniques in classical continuum physics, gauge theories, quantization procedures, and the foundations of quantum theory. The articles, written by leading scientists, address both researchers and graduate students in mathematics, physics, and philosophy of science.
