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                          quantization of linear relativistic field equations -- A lattice
                          approximation of the dirac equation -- Some hidden aspects of hidden
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                          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 grad- uate students in mathematics, physics, and philosophy of science.