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Nota di contenuto	Quantum mechanics beyond hilbert space -- Gamow states in a rigged hilbert space -- Some general properties of the liouville operator -- On dynamical semigroups and open systems -- Covariant quantum dynamical semigroups: Unbounded generators -- Quantum stochastic semigroups and their generators -- From stochastic semigroups to chaotic dynamics -- Complete positivity and neutral kaon decay -- Conventional and S-matrix approaches to hadronic resonances -- Z

boson resonance parameters -- Quantum theory in the rigged hilbert space — Irreversibility from causality -- Causality, particle localization and positivity of the energy -- Quantum scattering of resonances: Poles of a continued S-matrix and poles of an extended resolvent -- Accidental degeneracy and berry phase of resonant states -- The global nature of the arrow of time and the bohm-reichenbach diagram -- CP-violation problem beyond the standard lee-oehme-yang theory -- K 0 ? system in the rigged hilbert space quantum mechanics -- The lax-phillips semigroup of the unstable quantum system -- A geometrical approach to calculating determinants of Wiener-Hopf operators -- Time scale, objectivity and irreversibility in quantum mechanics -- Indirect measurements and the mirror theorem: A liouville formulation of quantum mechanics -- Semigroups and antieigenvalues.

Sommario/riassunto

This volume has its origin in the Semigroup Symposium which was organized in connection with the 21st International Colloquium on Group Theoretical Methods in Physics (ICGTMP) at Goslar, Germany, July 16-21, 1996. Just as groups are important tools for the description of reversible physical processes, semigroups are indispensable in the description of irreversible physical processes in which a direction of time is distinguished. There is ample evidence of time asymmetry in the microphysical world. The desire to go beyond the stationary systems has generated much recent effort and discussion regarding the application of semigroups to time-asymmetric processes. The book should be of interest to scientists and graduate students.