1. Record Nr.   UNINA9910484001303321

   Titolo   Spectral theory and mathematical physics : STMP 2018, Santiago, Chile
                       / / Pablo Miranda, Nicolas Popoff, Georgi Raikov, editors

   Pubbl/distr/stampa Cham, Switzerland : , : Springer, , [2020]
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   ISBN   3-030-55556-9

   Edizione   [1st ed. 2020.]

   Descrizione fisica 1 online resource (VIII, 272 p. 7 illus.)

   Collana   Latin American monograph & document series - UFSCar subseries

   Disciplina   515.7222

   Soggetti   Spectral theory (Mathematics)
                       Mathematical physics

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Nota di bibliografia   Includes bibliographical references.

   Nota di contenuto   Commutator methods for N-body Schrödinger operators -- Resolvent
                       estimates and resonance free regions for Schrödinger operators with
                       matrix-valued potentials -- One-dimensional discrete Anderson model
                       in a decaying random potential: From a.c. spectrum to dynamical
                       localization -- On non-selfadjoint operators with finite discrete
                       spectrum -- Pseudo-differential perturbations of the Landau
                       Hamiltonian -- Semiclassical surface wave tomography of isotropic
                       media -- Persistence of point spectrum for perturbations of one-
                       dimensional operators with discrete spectra -- Resonances for a
                       system of Schrödinger operators above an energy-level crossing --
                       Nonexistence result for wave operators in massive relativistic system --
                       Quantized calculus for perturbed massive Dirac operator on
                       noncommutative Euclidian space -- On the explicit semiclassical
                       limiting eigenvalue (resonance) distribution for the Zeeman (Stark)
                       hydrogen atom Hamiltonian -- Negative spectrum of the Robin
                       Laplacian -- On some integral operators appearing in scattering theory,
                       and their resolutions -- The strong Scott conjecture: The density of
                       heavy atoms close to the nucleus.

   Sommario/riassunto This proceedings volume contains peer-reviewed, selected papers and
                       surveys presented at the conference Spectral Theory and Mathematical
                       Physics (STMP) 2018 which was held in Santiago, Chile, at the Pontifical

Catholic University of Chile in December 2018. The original works gathered in this volume reveal the state of the art in the area and reflect the intense cooperation between young researchers in spectral theory and mathematical physics and established specialists in this field. The list of topics covered includes: eigenvalues and resonances for quantum Hamiltonians; spectral shift function and quantum scattering; spectral properties of random operators; magnetic quantum Hamiltonians; microlocal analysis and its applications in mathematical physics. This volume can be of interest both to senior researchers and graduate students pursuing new research topics in Mathematical Physics.