1. Record Nr. UNINA9910483915303321 Schrodinger operators, spectral analysis and number theory: in Titolo memory of Erik Balsley / / Sergio Albeverio, Anindita Balsley, Ricardo Weder, editors Cham, Switzerland: ,: Springer, , [2021] Pubbl/distr/stampa ©2021 **ISBN** 3-030-68490-3 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XXXII, 294 p. 32 illus., 13 illus. in color.) Collana Springer Proceedings in Mathematics and Statistics;; Volume 348 Disciplina 515.7222 Soggetti Spectral theory (Mathematics) Number theory Teoria espectral (Matemàtica) Teoria de nombres Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto S. Albeverio and R. Weder, Introduction to the scientific contributions in the book -- S. Albeverio and I. Karabash, Asymptotics of random resonances generated by a point process of delta-interactions -- M. S. Ashbaugh, F. Gesztesy, L. Hermi, K. Kirsten, L. Littlejohn and H. Tossounian, Green's function and Euler's formula for (2n) -- P. Bérard and B. Helffer, On Courant's nodal domain property for linear combinations of eigenfunctions -- Part II: A. Boutet de Monvel and L. Zielinski, Asymptotic behavior of large eigenvalues of the two-photon

resonances generated by a point process of delta-interactions -- M. S. Ashbaugh, F. Gesztesy, L. Hermi, K. Kirsten, L. Littlejohn and H. Tossounian, Green's function and Euler's formula for (2n) -- P. Bérard and B. Helffer, On Courant's nodal domain property for linear combinations of eigenfunctions -- Part II: A. Boutet de Monvel and L. Zielinski, Asymptotic behavior of large eigenvalues of the two-photon Rabi model -- J.-Michel Combes and P. Hislop, Some remarks on spectral averaging and the local density of states for random Schrödinger operators on L²(d) -- R. Froese and I. Herbst, Resonances in the one dimensional Stark effect in the limit of small field -- P. Kurasov and J. Muller, On the spectral gap for networks of beams -- K. Nicholas Leibovic, Some notes in the context of binocular space perception -- T. Paul, Symbolic calculus for singular curve operators -- Y. N. Petridis and M. S. Risager, Higher order deformations of hyperbolic spectra -- S. K. Sekatskii, On the generalized Li's criterion

equivalent to the Riemann hypothesis and its first applications -- M. Spreafico and A. Zaccagnini, Regularizing infinite products by the asymptotics of finite products -- R. Weder, Trace maps under weak regularity assumptions.

Sommario/riassunto

This book gives its readers a unique opportunity to get acquainted with new aspects of the fruitful interactions between Analysis, Geometry, Quantum Mechanics and Number Theory. The present book contains a number of contributions by specialists in these areas as an homage to the memory of the mathematician Erik Balslev and, at the same time, advancing a fascinating interdisciplinary area still full of potential. Erik Balslev has made original and important contributions to several areas of Mathematics and its applications. He belongs to the founders of complex scaling, one of the most important methods in the mathematical and physical study of eigenvalues and resonances of Schrödinger operators, which has been very essential in advancing the solution of fundamental problems in Quantum Mechanics and related areas. He was also a pioneer in making available and developing spectral methods in the study of important problems in Analytic Number Theory.