CONTENTS

| The Asymptotic Behavior of the Solutions of the Wave Equation Concentrated near the | |
|---|----------|
| Axis of a Two-Dimensional Waveguide in an Inhomogeneous Medium | |
| B. S. Buldyrev | |
| §1. A Waveguide in an Inhomogeneous Medium | |
| §2. The Construction of the Solutions of the Wave Equation Concentrated | |
| near the Waveguide Axis | Ę |
| §3. The Asymptotic Behavior of the Eigenfunctions and Eigenvalues of the | |
| Boundary Problem for the Waveguide | 15 |
| Literature Cited. | 23 |
| Perturbations of the Spectrum of the Schroedinger Operator with a Complex Periodic | |
| Potential | |
| V. A. Zheludev. | 25 |
| §1. Preliminary Information. | 25 |
| §2. Investigations of the Perturbed Operator. | 30 |
| §3. Investigation of the Spectrum under the Condition $\int q(x) e^{\delta x } dx < \infty$. | 37 |
| §4. Proof That There Are No Eigenvalues on the Continuous Spectrum. Literature Cited. | 38 |
| Diterature Cited. | 40 |
| The Discrete Spectra of the Dirac and Pauli Operators | |
| O. I. Kurbenin. | 43 |
| §1. Auxiliary Information. | 43 |
| §2. The Discrete Spectrum of the Dirac Operator in the Case of | 14400 |
| Spherical Symmetry. | 45 |
| §3. The Discrete Spectrum of the Dirac Operator in the | 4.2 |
| Three-Dimensional Case. | 48 |
| §4. The Discrete Spectrum of the Pauli Operator. | 50 50 |
| Literature Cited. | 52 |
| The Nonself-Adjoint Schroedinger Operator. III | |
| B. S. Pavlov. | 53 |
| §1. Auxiliary Information. | 53 |
| §2. The Operator with Potential $q(x) \in S_{\infty}$. | 55 |
| §3. The Operator with Potential $q(x) \in S_n$, $n < \infty$. | 65 |
| Literature Cited. | 71 |
| The Singular Numbers of the Sum of Completely Continuous Operators | |
| S. Yu. Rotfel'd. | 73 |
| Literature Cited. | 78 |

Vi

| Double-Integral Operators in the Ring Â | |
|---|----|
| M. Z. Soloymak. | 79 |
| Literature Cited. | 90 |
| Correction to "The Inverse Problem in the Theory of Seismic Wave Propagation" | |
| A. S. Blagoveshchenskii. | 93 |

