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| Nota di contenuto | Dispersion Decay and Scattering Theory; CONTENTS; List of Figures; Foreword; Preface; Acknowledgments; Introduction; 1 Basic Concepts and Formulas; 1 Distributions and Fourier transform; 2 Functional spaces; 2.1 Sobolev spaces; 2.2 Agmon-Sobolev weighted spaces; 2.3 Operator-valued functions; 3 Free propagator; 3.1 Fourier transform; 3.2 Gaussian integrals; 2 Nonstationary Schrodinger Equation; 4 Definition of solution; 5 Schrodinger operator; 5.1 A priori estimate; 5.2 Hermitian symmetry; 6 Dynamics for free Schrodinger equation; 7 Perturbed Schrodinger equation 7.1 Reduction to integral equation 7.2 Contraction mapping; 7.3 Unitarity and energy conservation; 8 Wave and scattering operators; 8.1 Moller wave operators: Cook method; 8.2 Scattering operator; 8.3 Intertwining identities; 3 Stationary Schrodinger Equation; 9 Free resolvent; 9.1 General properties; 9.2 Integral representation; 10 Perturbed resolvent; 10.1 Reduction to compact perturbation; 10.2 Fredholm Theorem; 10.3 Perturbation arguments; 10.4 Continuous spectrum; 10.5 Some improvements; 4 Spectral Theory; 11 Spectral |

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 11.2 Stationary Schrodinger equation
 11.3 Spectral representation; 11.4
 Commutation relation; 12 Analyticity of resolvent; 13 Gohberg-Bleher
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 20.4 Appendix A: Sobolev Trace Theorem; 20.5 Appendix B:
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 40.1 Spectral properties

Sommario/riassunto

A simplified, yet rigorous treatment of scattering theory methods and
 their applications. Dispersion Decay and Scattering Theory provides
 thorough, easy-to-understand guidance on the application of
 scattering theory methods to modern problems in mathematics,
 quantum physics, and mathematical physics. Introducing spectral
 methods with applications to dispersion time-decay and scattering
 theory, this book presents, for the first time, the Agmon-Jensen-Kato
 spectral theory for the Schrödinger equation, extending the theory to
 the Klein-Gordon equation. The dispersion decay p
