Record Nr.	UNINA9910462800503321
Autore	Bosch Carlos
Titolo	Functional calculi [[electronic resource] /] / Carlos Bosch and Charles Swartz
Pubbl/distr/stampa	Singapore, : World Scientific, c2013
ISBN	981-4415-98-7
Descrizione fisica	1 online resource (228 p.)
Altri autori (Persone)	SwartzCharles
Disciplina	515
Soggetti	Calculus Mathematics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface; Contents; 1. Vector and Operator Valued Measures; 1.1 Vector Measures; 1.2 Operator Valued Measures; 1.3 Extensions of Measures; 1.4 Regularity and Countable Additivity; 1.5 Countable Additivity on Products; 2. Functions of a Self Adjoint Operator; 3. Functions of Several Commuting Self Adjoint Operators; 4. The Spectral Theorem for Normal Operators; 5. Integrating Vector Valued Functions; 5.1 Vector Valued Measurable Functions; 5.2 Integrating Vector Valued Functions; 6. An Abstract Functional Calculus; 7. The Riesz Operational Calculus; 7.1 Power Series; 7.2 Laurent Series 7.3 Runge's Theorem7.4 Several Complex Variables; 7.5 Riesz Operational Calculus; 7.6 Abstract Functional Calculus; 7.7 Spectral Sets; 7.8 Isolated Points; 7.9 Wiener's Theorem; 8. Weyl's Functional Calculus; Appendix A The Orlicz-Pettis Theorem; Appendix B The Spectrum of an Operator; Appendix C Self Adjoint, Normal and Unitary Operators; Appendix D Sesquilinear Functionals; Appendix E Tempered Distributions and the Fourier Transform; E.1 Distributions; E.2 The Spaces S(Rn) and S'(Rn); E.3 Fourier Transform of Functions; E.4 Fourier Transform of a Tempered Distribution E.5 Paley-Wiener TheoremsBibliography; Index
Sommario/riassunto	A functional calculus is a construction which associates with an operator or a family of operators a homomorphism from a function

1.

space into a subspace of continuous linear operators, i.e. a method for defining "functions of an operator". Perhaps the most familiar example is based on the spectral theorem for bounded self-adjoint operators on a complex Hilbert space. This book contains an exposition of several such functional calculi. In particular, there is an exposition based on the spectral theorem for bounded, self-adjoint operators, an extension to the case of several commuting self-adjoint