1. Record Nr. UNINA9910450054903321

| | |
|---|---|
| Autore | Paulsen Vern I. <1951-> |
| Titolo | Completely bounded maps and operator algebras / / Vern Paulsen [[electronic resource]] |
| Pubbl/distr/stampa | Cambridge : , : Cambridge University Press, , 2002 |
| ISBN | 1-107-13453-6<br>1-280-42008-1<br>9786610420087<br>1-139-14839-7<br>0-511-16960-4<br>0-511-05470-X<br>0-511-30273-8<br>0-511-54663-7<br>0-511-06949-9 |
| Descrizione fisica | 1 online resource (xii, 300 pages) : digital, PDF file(s) |
| Collana | Cambridge studies in advanced mathematics ; ; 78 |
| Disciplina | 512/.55 |
| Soggetti | Operator algebras<br>Dilation theory (Operator theory)<br>Mappings (Mathematics) |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Title from publisher's bibliographic system (viewed on 05 Oct 2015). |
| Nota di bibliografia | Includes bibliographical references (p. 285-295) and index. |
| Nota di contenuto | 1. Introduction -- 2. Positive Maps -- 3. Completely Positive Maps -- 4. Dilation Theorems -- 5. Commuting Contractions on Hilbert Space -- 6. Completely Positive Maps into M[subscript n] -- 7. Arveson's Extension Theorems -- 8. Completely Bounded Maps -- 9. Completely Bounded Homomorphisms -- 10. Polynomially Bounded and Power-Bounded Operators -- 11. Applications to K-Spectral Sets -- 12. Tensor Products and Joint Spectral Sets -- 13. Abstract Characterizations of Operator Systems and Operator Spaces -- 14. An Operator Space Bestiary -- 15. Injective Envelopes -- 16. Abstract Operator Algebras -- 17. Completely Bounded Multilinear Maps and the Haagerup Tensor Norm -- 18. Universal Operator Algebras and Factorization -- 19. Similarity and Factorization. |

Sommario/riassunto

In this book, first published in 2003, the reader is provided with a tour of the principal results and ideas in the theories of completely positive maps, completely bounded maps, dilation theory, operator spaces and operator algebras, together with some of their main applications. The author assumes only that the reader has a basic background in functional analysis, and the presentation is self-contained and paced appropriately for graduate students new to the subject. Experts will also want this book for their library since the author illustrates the power of methods he has developed with new and simpler proofs of some of the major results in the area, many of which have not appeared earlier in the literature. An indispensable introduction to the theory of operator spaces for all who want to know more.