

1. Record Nr.	UNINA9910812438603321
Autore	Roch Steffen <1958->
Titolo	Finite sections of band-dominated operators // Steffen Roch
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , [2008] ©2008
ISBN	1-4704-0501-6
Descrizione fisica	1 online resource (104 p.)
Collana	Memoirs of the American Mathematical Society, , 0065-9266 ; ; number 895
Disciplina	512/.55
Soggetti	Operator algebras Operator theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Volume 191, number 895 (end of volume)."
Nota di bibliografia	Includes bibliographical references (pages 83-85) and index.
Nota di contenuto	""Contents""; ""Chapter 1. Introduction: Band-dominated operators""; ""Chapter 2. Stability""; ""2.1. Fredholm band-dominated operators and their indices""; ""2.2. Algebras of matrix sequences""; ""2.3. Stability vs. Fredholmness""; ""2.4. Stability of the finite sections method""; ""2.5. Band-dominated operators with slowly oscillating coefficients""; ""2.6. The role of the index""; ""2.7. The C*-algebra of the finite sections method""; ""2.8. Another perspective on localization""; ""Chapter 3. Stable regularizability""; ""3.1. Moore-Penrose invertibility in C*-algebras"" ""3.2. Stable regularizability vs. Moore- Penrose invertibility""""3.3. Stable regularizability of the finite sections method""; ""Chapter 4. Compactness""; ""4.1. Compact sequences""; ""4.2. Characterization via singular values""; ""4.3. Central rank characterizations""; ""4.4. Minimal and maximal characterizations""; ""4.5. Compact sequences in S(N) and S(Z)""; ""Chapter 5. Fredholmness""; ""5.1. Fredholm sequences""; ""5.2. Fredholmness and stability""; ""5.3. Fredholmness and stable regularizability""; ""5.4. Fredholmness of the finite sections method"" ""5.5. Slowly oscillating coefficients""""Chapter 6. Essential fractality""; ""6.1. Fractality of quotient maps""; ""6.2. J-fractal algebras""; ""6.3. Essential fractality and singular values""; ""6.4. Essential fractality of the finite sections algebras""; ""Chapter 7. Applications""; ""7.1. Approximation numbers""; ""7.2. Rank-preserving discretizations"";

""7.3. Arveson dichotomy: band- dominated operators""; ""7.4. Arveson
dichotomy: the general setting""; ""7.5. Essential spectra""; ""7.6.
Essential pseudospectra""; ""7.7. Pseudomodes""; ""7.8. Determinants"";
""Bibliography""; ""Index""
