

1. Record Nr.	UNINA9910451298603321
Autore	Nazaikinskii V. E
Titolo	Elliptic theory and noncommutative geometry [[electronic resource]] : nonlocal elliptic operators / / Vladimir E. Nazaikinskii, Anton Yu. Savin, Boris Yu. Sternin
Pubbl/distr/stampa	Basel, : Birkhauser, 2008
ISBN	1-281-49124-1 9786611491246 3-7643-8775-0
Edizione	[1st ed. 2008.]
Descrizione fisica	1 online resource (232 p.)
Collana	Operator theory, advances and applications Advances in partial differential equations ; ; v. 183
Altri autori (Persone)	SavinAnton Yu SterninB. IU
Disciplina	515.7242
Soggetti	Elliptic operators Noncommutative differential geometry 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	Analysis of Nonlocal Elliptic Operators -- Nonlocal Functions and Bundles -- Nonlocal Elliptic Operators -- Elliptic Operators over C^* -Algebras -- Homotopy Invariants of Nonlocal Elliptic Operators -- Homotopy Classification -- Analytic Invariants -- Bott Periodicity -- Direct Image and Index Formulas in K-Theory -- Chern Character -- Cohomological Index Formula -- Cohomological Formula for the ?-Index -- Index of Nonlocal Operators over C^* -Algebras -- Examples -- Index Formula on the Noncommutative Torus -- An Application of Higher Traces -- Index Formula for a Finite Group ?.
Sommario/riassunto	This comprehensive yet concise book deals with nonlocal elliptic differential operators, whose coefficients involve shifts generated by diffeomorphisms of the manifold on which the operators are defined. The main goal of the study is to relate analytical invariants (in particular, the index) of such elliptic operators to topological invariants of the manifold itself. This problem can be solved by modern methods of noncommutative geometry. This is the first and so far the only book

featuring a consistent application of methods of noncommutative geometry to the index problem in the theory of nonlocal elliptic operators. Although the book provides important results, which are in a sense definitive, on the above-mentioned topic, it contains all the necessary preliminary material, such as C*-algebras and their K-theory or cyclic homology. Thus the material is accessible for undergraduate students of mathematics (third year and beyond). It is also undoubtedly of interest for post-graduate students and scientists specializing in geometry, the theory of differential equations, functional analysis, etc. The book can serve as a good introduction to noncommutative geometry, which is one of the most powerful modern tools for studying a wide range of problems in mathematics and theoretical physics.

2. Record Nr.

Titolo

UNISA996475766903316

Pubbl/distr/stampa

Indonesian journal of medical laboratory science and technology

ISSN

Surabaya, Indonesia : , : Universitas Nahdlatul Ulama Surabaya

Descrizione fisica

2656-9825

1 online resource

Soggetti

Medical sciences

Medical laboratory technology

Medical technology

Lingua di pubblicazione

Inglese

Formato

Materiale a stampa

Livello bibliografico

Periodico

Note generali

Published in cooperation with: Indonesian Association of Schools of Medical Laboratory Technology