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   Collana   Operator Theory: Advances and Applications, , 2296-4878 ; ; 274

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   Soggetti   Operator theory
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   Nota di bibliografia   Includes bibliographical references and index.

   Nota di contenuto   Introduction -- Preliminary results -- The direct approach to the S-
                        functional calculus -- The Quaternionic Evolution Operator --
                        Perturbations of the generator of a group -- The Phillips-functional
                        calculus -- The H-Infinity -Functional Calculus -- Fractional powers of
                        quaternionic linear operators -- The fractional heat equation using
                        quaternionic techniques.-Applications to fractional diffusion- Historical
                        notes and References -- Appendix: Principles of functional Analysis.

   Sommario/riassunto   This book presents a new theory for evolution operators and a new
                        method for defining fractional powers of vector operators. This new
                        approach allows to define new classes of fractional diffusion and
                        evolution problems. These innovative methods and techniques, based
                        on the concept of S-spectrum, can inspire researchers from various
                        areas of operator theory and PDEs to explore new research directions in
                        their fields. This monograph is the natural continuation of the book:
                        Spectral Theory on the S-Spectrum for Quaternionic Operators by
                        Fabrizio Colombo, Jonathan Gantner, and David P. Kimsey (Operator
                        Theory: Advances and Applications, Vol. 270).