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   Autore   Strung Karen R.

   Titolo   An Introduction to C-Algebras and the Classification Program / / by
                      Karen R. Strung ; edited by Francesc Perera

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   Soggetti   Functional analysis
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                      Order, Lattices, Ordered Algebraic Structures

   Lingua di pubblicazione   Inglese

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   Nota di contenuto Banach algebras and spectral theory -- The Gelfand representation --
                      C*-algebra basics -- Positive elements -- Positive linear functionals
                      and representations -- Weak and strong operator topologies and von
                      Neumann algebras -- Tensor products for C*-algebras -- Completely
                      positive maps -- Inductive limits and approximately finite (AF) C*-
                      algebras -- Group C*-algebras and crossed products -- Cuntz
                      algebras -- Quasidiagonal C*-algebras -- K-theory for unital C*-
                      algebras -- Classification of AF-algebras -- Nuclear dimension --
                      Strongly self-absorbing algebras -- The Jiang-Su algebra -- Strict
                      comparison and the Cuntz semigroup -- The Classification Theorem
                      and the Toms-Winter Theorem.

   Sommario/riassunto This book is directed towards graduate students that wish to start from
                      the basic theory of C*-algebras and advance to an overview of some of
                      the most spectacular results concerning the structure of nuclear C*-
                      algebras. The text is divided into three parts. First, elementary notions,
                      classical theorems and constructions are developed. Then, essential
                      examples in the theory, such as crossed products and the class of
                      quasidiagonal C*-algebras, are examined, and finally, the Elliott
                      invariant, the Cuntz semigroup, and the Jiang-Su algebra are defined. It
                      is shown how these objects have played a fundamental role in

understanding the fine structure of nuclear C*-algebras. To help understanding the theory, plenty of examples, treated in detail, are included. This volume will also be valuable to researchers in the area as a reference guide. It contains an extensive reference list to guide readers that wish to travel further.