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Nota di contenuto	1. Introduction -- 2. Harmonic functions on locally compact groups: 2.1. Preliminaries and notation. 2.2. Poisson representation of harmonic functions. 2.3. Semigroup structures of the Poisson space. 2.4. Almost periodic harmonic functions. 2.5. Distal harmonic functions. 2.6. Transitive group actions on Poisson spaces. 2.7. Examples -- 3. Harmonic functionals on Fourier algebras: 3.1. Fourier algebras. 3.2. Harmonic functionals and associated ideals. 3.3. Jordan structures of harmonic functionals. 3.4. Classification of harmonic functionals -- References -- List of symbols -- Index.

Sommario/riassunto

This research monograph introduces some new aspects to the theory of harmonic functions and related topics. The authors study the analytic algebraic structures of the space of bounded harmonic functions on locally compact groups and its non-commutative analogue, the space of harmonic functionals on Fourier algebras. Both spaces are shown to be the range of a contractive projection on a von Neumann algebra and therefore admit Jordan algebraic structures. This provides a natural setting to apply recent results from non-associative analysis, semigroups and Fourier algebras. Topics discussed include Poisson representations, Poisson spaces, quotients of Fourier algebras and the Murray-von Neumann classification of harmonic functionals.
