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   Sommario/riassunto   "The aim of Spectral Geometry of Partial Differential Operators is to
                    provide a basic and self-contained introduction to the ideas
                    underpinning spectral geometric inequalities arising in the theory of
                    partial differential equations. Historically, one of the first inequalities of
                    the spectral geometry was the minimization problem of the first
                    eigenvalue of the Dirichlet Laplacian. Nowadays, this type of
                    inequalities of spectral geometry have expanded to many other cases
                    with number of applications in physics and other sciences. The main
                    reason why the results are useful, beyond the intrinsic interest of
                    geometric extremum problems, is that they produce a priori bounds for
                    spectral invariants of (partial differential) operators on arbitrary
                    domains. Features: Collects the ideas underpinning the inequalities of
                    the spectral geometry, in both self-adjoint and non-self-adjoint
                    operator theory, in a way accessible by anyone with a basic level of
                    understanding of linear differential operators Aimed at theoretical as
                    well as applied mathematicians, from a wide range of scientific fields,

including acoustics, astronomy, MEMS, and other physical sciences Provides a step-by-step guide to the techniques of non-self-adjoint partial differential operators, and for the applications of such methods. Provides a self-contained coverage of the traditional and modern theories of linear partial differential operators, and does not require a previous background in operator theory"--