Record Nr. UNISALENTO991004266238407536

Autore Krantz, Steven G.

Titolo Geometric analysis of the Bergman Kernel and metric / by Steven G.

Krantz

Pubbl/distr/stampa New York, NY: Springer, 2013

ISBN 9781493944293

Collana Graduate Texts in Mathematics, 2197-5612; 268

Classificazione LC QA374

AMS 30H20

Disciplina 515.7

Soggetti Partial Differential Equations

Functional Analysis
Differential Geometry
Analysis (Mathematics)

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Sommario/riassunto

This text provides a masterful and systematic treatment of all the basic analytic and geometric aspects of Bergman's classic theory of the kernel and its invariance properties. These include calculation, invariance properties, boundary asymptotics, and asymptotic expansion of the Bergman kernel and metric.[xc2][xa0]Moreover, it[xc2][xa0] presents a unique compendium of results with applications to function theory, geometry, partial differential equations, and interpretations in the language of functional analysis, with emphasis on the several complex variables context. Several of these topics appear here for the first time in book form. Each chapter includes illustrative examples and a collection of exercises which will be of interest to both graduate students and experienced mathematicians. Graduate students who have taken courses in complex variables and have a basic background in real and functional analysis will find this textbook appealing. Applicable courses for either main or supplementary usage include those in complex variables, several complex variables, complex differential geometry, and partial differential equations. Researchers in complex analysis, harmonic analysis, PDEs, and complex differential geometry

will also benefit from the thorough treatment of the many exciting aspects of Bergman's theory