Fonctions De Plusieurs Variables Complexes S Minaire Fran Ois Norguet Octobre 1970 Decembre 197 Fr

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Fonctions de Plusieurs Variables Complexes Springer
Spectral Theory and Complex Analysis
Fonctions de Plusieurs Variables Complexes V American Mathematical Soc.
An Introduction to Complex Analysis in Several Variables
Selected Papers - Oeuvres Scientifiques I Springer
'Kiyoshi Oka, at the beginning of his research, regarded the collection of problems which he encountered in the study of domains of holomorphy as large mountains which separate today and tomorrow. Thus, he believed that there could be no essential progress in analysis without climbing over these mountains ... this book is a worthwhile initial step for the reader in order to understand the mathematical world which was created by Kiyoshi Oka.' -- from the Preface. This book explains results in the theory of functions of several complex variables which were mostly established from the late nineteenth century through to the middle of the twentieth century. In the work, the author introduces the mathematical world created by his advisor, Kiyoshi Oka. In this volume, Oka's work is divided into two parts. The first is the study of analytic functions in univalent domains in ${\mathbf C}n$. Here Oka proved that three concepts are equivalent: domains of holomorphy, holomorphically convex domains, and pseudoconvex domains; and moreover that the Poincaré problem, the Cousin problems, and the Runge problem, when stated properly, can be solved in domains of holomorphy satisfying the appropriate conditions. The second part of Oka's work established a method for the study of analytic functions defined in a ramified domain over ${\mathbf C}n$ in which the branch points are considered as interior points of the domain. Here analytic functions in an analytic space are treated, which is a slight generalization of a ramified domain over ${\mathbf C}n$. In

writing the book, the author's goal was to bring to readers a real understanding of Oka's original papers. This volume is an English translation of the original Japanese edition, published by the University of Tokyo Press (Japan). It would make a suitable course text for advanced graduate level introductions to several complex variables.

Analytic Function Theory of Several Variables Springer

This volume of the EMS contains four survey articles on analytic spaces. They are excellent introductions to each respective area. Starting from basic principles in several complex variables each article stretches out to current trends in research. Graduate students and researchers will find a useful addition in the extensive bibliography at the end of each article.

Les fonctions de plusieurs variables complexes et leur application à la théorie quantique des champs World Scientific Publishing Company

This book deals with integral representations of holomorphic functions of several complex variables, the multidimensional logarithmic residue, and the theory of multidimensional residues. Applications are given to implicit function theory, systems of nonlinear equations, computation of the multiplicity of a zero of a mapping, and computation of combinatorial sums in closed form. Certain applications in multidimensional complex analysis are considered. The monograph is intended for specialists in theoretical and applied mathematics and theoretical physics, and for postgraduate and graduate students interested in multidimensional complex analysis or its applications.

Théorie élémentaire des fonctions analytiques d'une ou plusieurs variables complexes Elsevier

This meeting has been motivated by two events: the 85th birthday of Pierre Lelong, and the end of the third year of the European network "Complex analysis and analytic geometry" from the programme Human Capital and Mobility. For the first event, Mathematicians from Poland, Sweden, United States and France, whose work is particularly related to the one ofP. Lelong have accepted to participate; for the second, the different teams of the Network sent lecturers to report on their most recent works. These teams are from Grenoble, Wuppertal, Berlin, Pisa and Paris VI; in fact, most of their results are also related to Lelong's work and, a posteriori, it is difficult to decide whether a talk is motivated by the first or by the second event. We chose only plenary lectures, usually of one hour, except a small number, given by young mathematicians, which have been shorter. A two hours problem session has been organized. The Proceedings gather papers which are exact texts of the talks, or are closely related to them. The members from the Network and five other lecturers sent us papers; the other lecturers published the content of their talks in mathematical Journals. All the presented texts have been submitted to referees independent of the organizing committee; the texts of the problems have been approved by their authors.

Fonctions périodiques d'une ou plusieurs variables complexes ... Editions Hermann

The main theme of this book is the homotopy principle for holomorphic mappings from Stein manifolds to the newly introduced class of Oka manifolds. The book contains the first complete account of Oka-Grauert theory and its modern extensions, initiated by Mikhail Gromov and developed in the last decade by the author and his collaborators. Included is the first systematic presentation of the theory of holomorphic automorphisms of complex Euclidean spaces, a survey on Stein neighborhoods, connections between the geometry of Stein surfaces and Seiberg-Witten theory, and a wide variety of applications ranging from classical to contemporary.

Fonctions de plusieurs variables complexes III Springer Science & Business Media

This collection reflects the life's work of one of the great twentieth century French mathematicians. The three volumes cover Leray's seminal work in algebraic topology, fluid mechanics and PDE, and the theory of several complex variables. Including informed introductions by modern mathematicians.

Integral Representations and Residues in Multidimensional Complex Analysis Springer

Expository articles on Several Complex Variables and its interactions with PDEs, algebraic geometry, number theory, and differential geometry, first published in 2000.

Function Theory in Several Complex Variables World Scientific

Jean Leray (1906-1998) was one of the great French mathematicians of his century. His life's work can be divided into 3 major areas, reflected in these three volumes. Volume I, to which an Introduction has been contributed by A. Borel, covers Leray's seminal work in algebraic topology, where he created sheaf theory and discovered the spectral sequences. Volume II, with an introduction by P. Lax, covers fluid mechanics and partial differential equations. Leray demonstrated the existence of the infinite-time extension of weak solutions of the Navier-Stokes equations; 60 years later this profound work has retained all its impact. Volume III, on the theory of several complex variables, has a long introduction by G. Henkin. Leray's work on the ramified Cauchy problem will stand for centuries alongside the Cauchy-Kovalevska theorem for the unramified case. He was awarded the Malaxa Prize (1938), the Grand Prix in Mathematical Sciences (1940), the Feltrinelli Prize (1971), the Wolf Prize in Mathematics (1979), and the Lomonosov Gold Medal (1988).

Sur les fonctions orthogonales de plusieurs variables complexes, avec les applications à la théorie des fonctions analytiques Springer

This volume is an introductory text in several complex variables, using methods of integral representations and Hilbert space theory. It investigates mainly the studies of the estimate of solutions of the Cauchy-Riemann equations in pseudoconvex domains and the extension of holomorphic functions in submanifolds of pseudoconvex domains which were developed in the last 50 years. We discuss the two main studies mentioned above by two different methods: the integral formulas and the Hilbert space techniques. The theorems concerning general pseudoconvex domains are analyzed using Hilbert space theory, and the proofs for theorems concerning strictly pseudoconvex domains are solved using integral representations. This volume is written in a self-contained style, so that the proofs are easily accessible to beginners. There are exercises featured at the end of each chapter to aid readers to better understand the materials of this volume. Fairly detailed hints are articulated to solve these exercises.

Spectral Theory and Complex Analysis Springer

The papers contained in this book address problems in one and several complex variables. The main theme is the extension of geometric function theory methods and theorems to several complex variables. The papers present various results on the growth of mappings in various classes as well as observations about the boundary behavior of mappings, via developing and using some semi group methods.

Geometric Function Theory in Several Complex Variables Springer

This collection reflects the life's work of one of the great twentieth century French

mathematicians. The three volumes cover Leray's seminal work in algebraic topology, fluid mechanics and PDE, and the theory of several complex variables. Including informed introductions by modern mathematicians.

Fonctions de plusieurs variables complexes American Mathematical Soc.

The purpose of this book is to present the classical analytic function theory of several variables as a standard subject in a course of mathematics after learning the elementary materials (sets, general topology, algebra, one complex variable). This includes the essential parts of Grauert–Remmert's two volumes, GL227(236) (Theory of Stein spaces) and GL265 (Coherent analytic sheaves) with a lowering of the level for novice graduate students (here, Grauert's direct image theorem is limited to the case of finite maps).The core of the theory is "Oka's Coherence", found and proved by Kiyoshi Oka. It is indispensable, not only in the study of complex analysis and complex geometry, but also in a large area of modern mathematics. In this book, just after an introductory chapter on holomorphic functions (Chap. 1), we prove Oka's First Coherence Theorem for holomorphic functions in Chap. 2. This defines a unique character of the book compared with other books on this subject, in which the notion of coherence appears much later.The present book, consisting of nine chapters, gives complete treatments of the following items: Coherence of sheaves of holomorphic functions (Chap. 2); Oka–Cartan's Fundamental Theorem (Chap. 4); Coherence of ideal sheaves of complex analytic subsets (Chap. 6); Coherence of the normalization sheaves of complex spaces (Chap. 6); Grauert's Finiteness Theorem (Chaps. 7, 8); Oka's Theorem for Riemann domains (Chap. 8). The theories of sheaf cohomology and domains of holomorphy are also presented (Chaps. 3, 5). Chapter 6 deals with the theory of complex analytic subsets. Chapter 8 is devoted to the applications of formerly obtained results, proving Cartan–Serre's Theorem and Kodaira's Embedding Theorem. In Chap. 9, we discuss the historical development of "Coherence".It is difficult to find a book at this level that treats all of the above subjects in a completely self-contained manner. In the present volume, a number of classical proofs are improved and simplified, so that the contents are easily accessible for beginning graduate students.

Analyse complexe L'Editeur : EDP Sciences

Ce livre est destiné aux étudiants de licence de mathématiques (L2, L3), ainsi qu'aux candidats préparant le CAPES ou l'agrégation et aux élèves des grandes écoles scientifiques et techniques. Il peut également être utile aux étudiants de master de mathématiques (M1, M2) pour certaines parties. Plusieurs chapitres ont été consacrés aux méthodes de la théorie des fonctions d'une variable complexe. Le texte contient aussi une introduction au domaine assez vaste des fonctions de plusieurs variables complexes, aux variétés analytiques et ensembles analytiques. L'auteur s'est efforcé d'intégrer dans cet ouvrage certaines notions (par exemple les fonctions et intégrales elliptiques, les surfaces de Riemann, solutions méromorphes des équations différentielles, etc.) relevant du master de mathématiques dont l'utilisation constitue actuellement des outils indispensables aux mathématiciens, physiciens, ingénieurs et autres scientifiques. Le livre est complété par des appendices comportant quelques rappels sur les séries entières, les produits infinis, la théorie de la mesure et l'intégrale de Lebesgue, les variétés différentiables, les formes différentielles, résultants et discriminants. Il se termine avec une bibliographie et un index détaillé.

An Introduction to Complex Analysis in Several Variables Elsevier

Une introduction à la théorie des fonctions holomorphes de plusieurs variables dans Cn et dans les variétés analytiques complexes. La présentation, suivant la méthode des représentations intégrales associées à la technique des bosses de Grauert, permet le prolongement naturel des techniques utilisées dans la théorie des fonctions holomorphes à une variable.

Several Complex Variables IV EDP Sciences

L'objet de cet ouvrage est une introduction à la théorie des fonctions holomorphes de plusieurs variables dans Cn et dans les variétés analytiques complexes. La présentation choisie, suivant la méthode des représentations intégrales associées à la technique des bosses de Grauert, permet le prolongement naturel des techniques utilisées dans la théorie des fonctions holomorphes à une variable.

Selected Papers - Oeuvres Scientifiques I Cambridge University Press

Théorie élémentaire des fonctions analytiques d'une ou plusieurs variables complexes Birkhäuser

Fonctions de Plusieurs Variables Complexes IV American Mathematical Soc.