

Several complex variables and analytic spaces

Non-Archimedean analysis (should also be assigned at least one other classification number from Section 32-XX describing the type of problem)

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Holomorphic mappings and correspondences

Iteration of holomorphic maps, fixed points of holomorphic maps and related problems for several complex variables

Holomorphic mappings, (holomorphic) embeddings and related questions in several complex variables

Picard-type theorems and generalizations for several complex variables

Boundary uniqueness of mappings in several complex variables

Boundary regularity of mappings in several complex variables

Proper holomorphic mappings, finiteness theorems

Meromorphic mappings in several complex variables

Value distribution theory in higher dimensions

Holomorphic convexity

Holomorphic, polynomial and rational approximation, and interpolation in several complex variables; Runge pairs

Polynomial convexity, rational convexity, meromorphic convexity in several complex variables

Global boundary behavior of holomorphic functions of several complex variables

Holomorphically convex complex spaces, reduction theory

Stein spaces, Stein manifolds

The Levi problem

Complex singularities

Topological aspects of complex singularities: Lefschetz theorems, topological classification, invariants

Stratifications; constructible sheaves; intersection cohomology (complex-analytic aspects)

Monodromy; relations with differential equations and *D*-modules (complex-analytic aspects)

Milnor fibration; relations with knot theory

Equisingularity (topological and analytic)

Relations with arrangements of hyperplanes

Other operations on complex singularities

Modifications; resolution of singularities (complex-analytic aspects)

Global theory of complex singularities; cohomological properties

Mixed Hodge theory of singular varieties (complex-analytic aspects)

Singularities of holomorphic vector fields and foliations

Invariants of analytic local rings

Deformations of complex singularities; vanishing cycles

Local complex singularities

Complex surface and hypersurface singularities

Complex spaces with a group of automorphisms

Hermitian symmetric spaces, bounded symmetric domains, Jordan algebras (complex-analytic aspects)

Automorphism groups of other complex spaces

Almost homogeneous manifolds and spaces

Automorphism groups of \mathbb{C}^n and affine manifolds

Complex vector fields, holomorphic foliations, \mathbb{C} -actions

Homogeneous complex manifolds

Complex Lie groups, group actions on complex spaces

Analytic spaces

Real-analytic sets, complex Nash functions

Analytic sheaves and cohomology groups

Embedding of real-analytic manifolds

Duality theorems for analytic spaces

Local cohomology of analytic spaces

Applications of analytic spaces to physics and other areas of science

Analytic subsets and submanifolds

Sheaves of differential operators and their modules, *D*-modules

Embedding of analytic spaces

Topology of analytic spaces

Normal analytic spaces

The Levi problem in complex spaces; generalizations

Integration on analytic sets and spaces, currents

Real-analytic manifolds, real-analytic spaces

Complex supergeometry

Complex spaces

Geometric convexity in several complex variables

Other notions of convexity in relation to several complex variables

Invariant metrics and pseudodistances in several complex variables

Analytical consequences of geometric convexity (vanishing theorems, etc.)

q-convexity, *q*-concavity

Finite-type conditions for the boundary of a domain

Topological consequences of geometric convexity

Complex manifolds

Special domains (Reinhardt, Hartogs, circular, tube, etc.) in \mathbb{C}^n and complex manifolds

Calabi-Yau theory (complex-analytic aspects)

Notions of stability for complex manifolds

Embedding theorems for complex manifolds

Topological aspects of complex manifolds

Negative curvature complex manifolds

Kähler manifolds

Positive curvature complex manifolds

Uniformization of complex manifolds

Classification theorems for complex manifolds

Oka principle and Oka manifolds

Complex manifolds as subdomains of Euclidean space

Kähler-Einstein manifolds

Hyperbolic and Kobayashi hyperbolic manifolds

Almost complex manifolds

Pseudoholomorphic curves

Stein manifolds

Introductory exposition (textbooks, tutorial papers, etc.) pertaining to several complex variables and analytic spaces

Research exposition (monographs, survey articles) pertaining to several complex variables and analytic spaces

Local analytic geometry

Triangulation and topological properties of semi-analytic and subanalytic sets, and related questions

Analytic algebras and generalizations, preparation theorems

Analytic subsets of affine space

Semi-analytic sets, subanalytic sets, and generalizations

Germes of analytic sets, local parametrization

Automorphic functions

Automorphic functions in symmetric domains

General theory of automorphic functions of several complex variables

Automorphic forms in several complex variables

Generalizations of analytic spaces

Holomorphic maps with infinite-dimensional arguments or values

Banach analytic manifolds and spaces

Differentiable functions on analytic spaces, differentiable spaces

Formal and graded complex spaces

Proceedings, conferences, collections, etc. pertaining to several complex variables and analytic spaces

Software, source code, articles for problems pertaining to several complex variables and analytic spaces

Research data for problems pertaining to several complex variables and analytic spaces

General reference works (handbooks, dictionaries, bibliographies, etc.) pertaining to several complex variables and analytic spaces

Computational methods for problems pertaining to several complex variables and analytic spaces

Holomorphic functions of several complex variables

Normal families of holomorphic functions, mappings of several complex variables, and related topics (taut manifolds etc.)

Other generalizations of function theory of one complex variable (should also be assigned at least one classification number from Section 30-XX)

Other spaces of holomorphic functions of several complex variables (e.g., bounded mean oscillation (BMOA), vanishing mean oscillation (VMOA))

Integral representations, constructed kernels (e.g., Cauchy, Fantappiè-type kernels)

Hyperfunctions

Multifunctions of several complex variables

Nevanlinna theory; growth estimates; other inequalities of several complex variables

Functional analysis techniques applied to functions of several complex variables

Residues for several complex variables

Special families of functions of several complex variables

H^p -spaces, Nevanlinna spaces of functions in several complex variables

Boundary behavior of holomorphic functions of several complex variables

Power series, series of functions of several complex variables

Banach algebra techniques applied to functions of several complex variables

Integral representations; canonical kernels (Szegő, Bergman, etc.)

Polynomials and rational functions of several complex variables

Zero sets of holomorphic functions of several complex variables

Bloch functions, normal functions of several complex variables

Algebras of holomorphic functions of several complex variables

Singular integrals of functions in several complex variables

Bergman spaces of functions in several complex variables

Holomorphic functions of several complex variables

Entire functions of several complex variables

Meromorphic functions of several complex variables

Harmonic analysis of several complex variables

Analytic continuation

Continuation of analytic objects in several complex variables

Removable singularities in several complex variables

Envelopes of holomorphy

Domains of holomorphy

Riemann domains

Holomorphic fiber spaces

Sheaves and cohomology of sections of holomorphic vector bundles, general results

Holomorphic bundles and generalizations

Twistor theory, double fibrations (complex-analytic aspects)

Applications of holomorphic fiber spaces to the sciences

Vanishing theorems

Bundle convexity

Pluripotential theory

Removable sets in pluripotential theory

Plurisubharmonic exhaustion functions

Plurisubharmonic extremal functions, pluricomplex Green functions

Capacity theory and generalizations

General pluripotential theory

Plurisubharmonic functions and generalizations

Lelong numbers

Currents

History of several complex variables and analytic spaces