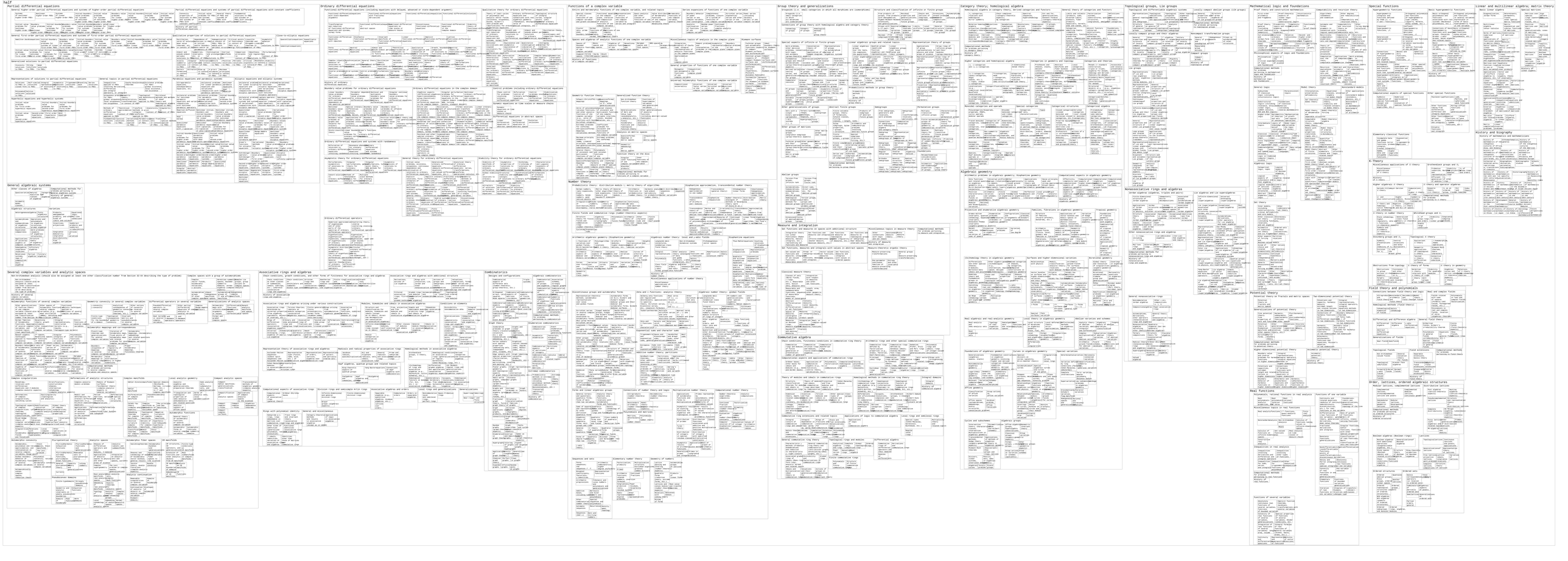
half
Partial differential equations
General higher-order partial differential equations and systems of higher-order partial differential equations
Partial differential equations and systems of partial differential equations with constant coefficients
Ordinary differential equations
Functions of a complex variable
Group theory and generalizations
Category theory; homological algebra
Topological groups, Lie groups
Special functions
Linear and multilinear algebra; matrix theory
Partial differential equations
Representations of solutions to partial differential equations
General topics in partial differential equations
Qualitative properties of solutions to partial differential equations
Close-to-elliptic equations
Hyperbolic equations and hyperbolic systems
Parabolic equations and parabolic systems
Elliptic equations and elliptic systems
Ordinary differential equations
Qualitative theory for ordinary differential equations
Boundary value problems for ordinary differential equations
Control problems including ordinary differential equations
Ordinary differential equations and systems with randomness
Stability theory for ordinary differential equations
Ordinary differential operators
General algebraic systems
Other classes of algebras
Computational methods for problems pertaining to general algebraic systems
Algebraic structures
Varieties
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)
Complex spaces with a group of automorphisms
Several complex variables and complex manifolds
Geometric convexity in several complex variables
Differential operators in several variables
Holomorphic mappings and correspondences
Complex manifolds
Local analytic geometry
Compact analytic spaces
Complex singularities
Deformations of analytic structures
Global analysis
Pluripotential theory
Analytic spaces
Holomorphic fiber spaces
CR manifolds
Associative rings and algebras
Chain conditions, growth conditions, and other forms of finiteness for associative rings and algebras
Associative rings and algebras with additional structure
Associative rings and algebras arising under various constructions
Modules, bimodules and ideals in associative rings
Conditions on elements
Representation theory of associative rings and algebras
Radicals and radical properties of associative rings
Homological methods in associative rings and algebras
Associative algebras and orders
Division rings and semisimple Artin rings
Rings with polynomial identity
General and miscellaneous
Combinatorics
Designs and configurations
Algebraic combinatorics
Graph theory
Extremal combinatorics
Enumerative combinatorics
Matroids, geometric lattices
Ordered sets and their generalizations
Combinatorial optimization
Probabilistic methods, combinatorial probability
Number theory
Probability theory; distribution and limit theorems; stochastic processes
Probability theory; distribution measures; metric theory of algorithms
Arithmetic algebraic geometry (Diophantine geometry)
Algebraic number theory: local and global fields
Diophantine approximation, transcendental number theory
Diophantine equations
Measure and integration
Set functions, measures and integrals with values in abstract spaces
Measure theory
Miscellaneous topics in measure theory
Classical measure theory
Real functions
Functions of bounded variation, generalizations
Measurable functions, Borel and Lebesgue measurability
Derivatives
Absolutely continuous functions
Integrals of Riemann, Stieltjes and Lebesgue type
Inequalities involving derivatives and differential and integral operators
Functional analysis
Linear spaces and related structures
Linear operators and ergodic theory
Nonlinear operators and their properties
Spectral theory and eigenvalue problems
Applications of functional analysis to differential and integral equations
Miscellaneous topics in functional analysis
Computational methods in functional analysis
Calculus of variations and optimal control; optimization
Calculus of variations and optimal control
Optimality conditions
Sufficient theorems
Necessary conditions
Relations to Hamilton-Jacobi equations
Relations to Pontryagin maximum principle
Existence theories
Regularity of solutions
Sensitivity, bifurcations, stability
Numerical methods
Optimization
Linear programming
Nonlinear programming
Dynamic programming
Integer programming
Stochastic programming
Network flow problems
Game theory
Operations research, mathematical programming
Mathematical programming
Queues and service
Inventory, storage, reservoirs
Reliability, testing
Information and communication, circuits
Economics
Biology and other natural sciences
Mechanics of particles and systems
Classical mechanics of discrete systems
Kinematics of rigid bodies
Dynamics of rigid bodies
Dynamical systems and ergodic theory
Classical mechanics of particles and systems
Celestial mechanics
Variational principles of physics
Mechanics of deformable solids
Elasticity
Plasticity
Thermoelasticity
Viscoelasticity
Mechanics of solids
Fluid mechanics
Basic methods in fluid mechanics
Incompressible viscous fluids
Compressible viscous fluids
Perfect fluids
Magnetohydrodynamics and electrohydrodynamics
Optics, electromagnetic theory
Geometric optics
Wave theory
Electromagnetic theory
Classical thermodynamics, heat transfer
Equations of state
Classical thermodynamics
Heat transfer
Statistical mechanics, structure of matter
Quantum mechanics
General principles and conceptual foundations
Operators in quantum theory
Quantum dynamics and nonrelativistic models
Many-body theory; quantum-field theory
Relativistic quantum theory
Foundations, quantum logic, philosophical questions
Geophysics
Astronomy and astrophysics
Statistical mechanics of equilibrium
Statistical mechanics of nonequilibrium processes
Statistical mechanics of irreversible phenomena
Statistical mechanics of systems with many degrees of freedom
Statistical mechanics of random media, disordered materials
Statistical mechanics of phase transitions
Statistical mechanics of fluctuations and stochastic processes
Statistical mechanics of nonlinear dynamical systems
Statistical mechanics of lattice systems
Statistical mechanics of polymers
Statistical mechanics of biopolymers
Statistical mechanics of gases
Statistical mechanics of liquids
Statistical mechanics of solids
Statistical mechanics of surfaces and interfaces
Statistical mechanics of magnetic materials
Statistical mechanics of superconductors
Statistical mechanics of electronic structure
Statistical mechanics of nuclear matter
Statistical mechanics of plasmas
Statistical mechanics of quantum fluids
Statistical mechanics of quantum solids
Statistical mechanics of quantum gases
Statistical mechanics of quantum liquids
Statistical mechanics of quantum magnetic materials
Statistical mechanics of quantum superconductors
Statistical mechanics of quantum electronic structure
Statistical mechanics of quantum nuclear matter
Statistical mechanics of quantum