

Inequalities with Applications in Numerical Analysis

Mathematical Inequalities have registered an exponential growth in the last two decades with numerous applications in other fields of Modern Mathematics including Numerical Analysis, Approximation Theory, Qualitative Theory of Differential & Integral Equations, Integral Operator Theory, Information Theory and other areas.

Communications in the following fields, as described by the MSC 2000 of the American Mathematical Society, are welcome:

- 15A39 Linear inequalities
- 15A42 Inequalities involving eigenvalues and eigenvectors
- 15A45 Miscellaneous inequalities involving matrices
- [26Dxx](#) Inequalities {For maximal function inequalities, see [42B25](#); for functional inequalities, see [39B72](#); for probabilistic inequalities, see [60E15](#)}
- 26D05 Inequalities for trigonometric functions and polynomials
- 26D07 Inequalities involving other types of functions
- 26D10 Inequalities involving derivatives and differential and integral operators
- 26D15 Inequalities for sums, series and integrals
- 26D20 Other analytical inequalities
- 30A10 Inequalities in the complex domain
- 34A40 Differential inequalities [See also [26D20](#)]
- 35J85 Unilateral problems and variational inequalities for elliptic PDE [See also [35R35](#), [49J40](#)]
- 5K85 Unilateral problems and variational inequalities for parabolic PDE [See also [35R35](#), [49J40](#)]
- 35L85 Unilateral problems; variational inequalities for hyperbolic PDE [See also [35R35](#), [49J40](#)]
- [35Rxx](#)35R45 Partial differential inequalities
- Functional equations and inequalities [See also [30D05](#)]
- 39B62 Functional inequalities, including subadditivity, convexity, etc. [See also [26A51](#), [26B25](#), [26Dxx](#)]
- 41A17 Inequalities in approximation (Bernstein, Jackson, Nikol'skii-type inequalities)
- 42A05 Trigonometric polynomials, inequalities, extremal problems
- [47Jxx](#) Equations and inequalities involving nonlinear operators [See also [46Txx](#)] {For global and geometric aspects, see [58-xx](#)}
- 47A30 Norms (inequalities, more than one norm, etc.)
- 47A50 Equations and inequalities involving linear operators, with vector unknowns
- :47A63 Operator inequalities
- 47J20 Variational and other types of inequalities involving nonlinear operators (general)
- 49J40 Variational methods including variational inequalities [See also [47J20](#)]
- 51M16 Inequalities and extremum problems {For convex problems, see [52A40](#)}
- 52A40 Inequalities and extremum problems
- 58E35 Variational inequalities (global problems)
- 60E15 Inequalities; stochastic orderings

Last, but not least, communications in Applied Numerical Analysis in which theoretical techniques were based on the various classes of Inequalities outlined above, are strongly encouraged.