

## TABLE OF CONTENTS

### VOLUME CXVIII-1

T. SHEIL-SMALL — Bergman space extremal problems for non-vanishing functions	1
SÉBASTIEN FERENCZI — Dynamical generalizations of the Lagrange spectrum	19
JAMES COLLIANDER, SOONSIK KWON, AND TADAHIRO OH — A remark on normal forms and the “upside-down” $I$ -method for periodic NLS: growth of higher Sobolev norms	55
SALOMÓN ALARCÓN, JORGE GARCÍA-MELIÁN, AND ALEXANDER QUAAS — Existence and uniqueness of solutions of nonlinear elliptic equations without growth conditions at infinity	83
S. DELVAUX, A. B. J. KUIJLAARS, P. ROMÁN, AND L. ZHANG — Non-intersecting squared Bessel paths with one positive starting and ending point	105
KAZUHIRO ISHIGE AND MICHINORI ISHIWATA — Heat equation with a singular potential on the boundary and the Kato inequality	161
T. P. HYTÖNEN, M. T. LACEY, H. MARTIKAINEN, T. ORPONEN, M. REGUERA, E. T. SAWYER, AND I. URIARTE-TUERO — Weak and strong type estimates for maximal truncations of Calderón-Zygmund operators on $A_p$ weighted spaces	177
J. BOURGAIN — Integral Apollonian circle packings and prime curvatures	221
PATRICK J. RABIER — Embeddings of weighted Sobolev spaces and generalized Caffarelli-Kohn-Nirenberg inequalities	251
Y. DU, R. PENG, AND P. POLÁČIK — The parabolic logistic equation with blow-up initial and boundary values	297
VILMOS TOTIK — Chebyshev polynomials on a system of curves	317

Continued on the next page

JOAQUIM ORTEGA-CERDÀ AND KRISTIAN SEIP — A lower bound in Nehari's theorem on the polydisc	339
LEONID V. KOVALEV AND JANI ONNINEN — Quasisymmetric graphs and Zygmund functions	343
MATHIAS KELLER, DANIEL LENZ, AND SIMONE WARZEL — Absolutely continuous spectrum for random operators on trees of finite cone type	363

## TABLE OF CONTENTS

### VOLUME CXVIII-2

ROBERT J. BUCKINGHAM AND PETER D. MILLER — The sine-Gordon equation in the semiclassical limit: critical behavior near a separatrix	397
ALON NISHRY — Hole probability for entire functions represented by Gaussian Taylor series	493
NADINE BADR, FRÉDÉRIC BERNICOT, AND EMMANUEL RUSS — Algebra properties for Sobolev spaces - Applications to semilinear PDEs on manifolds	509
ALEXANDER GOMILKO, MARKUS HAASE, AND YURI TOMILOV — Bernstein functions and rates in mean ergodic theorems for operator semigroups	545
B. J. JAYE, V. G. MAZ'YA, AND I. E. VERBITSKY — Existence and regularity of positive solutions of elliptic equations of Schrödinger type	577
YURI A. ANTIPOV, RICARDO ESTRADA, AND BORIS RUBIN — Method of analytic continuation for the inverse spherical mean transform in constant curvature spaces	623
STEVEN DELVAUX AND HOLGER DETTE — Zeros and ratio asymptotics for matrix orthogonal polynomials	657
HAAKAN HEDENMALM — Heisenberg's uncertainty principle in the sense of Beurling	691