Contents

Preface ........................................................................................................ vii

Q. Guo and M.W. Wong
  Adaptive Wavelet Computations for Inverses of
  Pseudo-Differential Operators ......................................................... 1

M. Pirhayati
  Spectral Theory of Pseudo-Differential Operators on $\mathbb{S}^1$ .......... 15

S. Molahajloo
  A Characterization of Compact Pseudo-Differential
  Operators on $\mathbb{S}^1$ ................................................................. 25

B.-W. Schulze and M.W. Wong
  Mellin Operators with Asymptotics on Manifolds with Corners ...... 31

B.-W. Schulze
  The Iterative Structure of the Corner Calculus ............................ 79

V.B. Vasilyev
  Elliptic Equations and Boundary Value Problems
  in Non-Smooth Domains ............................................................ 105

C. Iwasaki
  Calculus of Pseudo-Differential Operators and a Local Index
  of Dirac Operators ....................................................................... 123

J. Delgado
  $L^p$ Bounds for a Class of Fractional Powers of Subelliptic Operators . 137

V. Catană
  The Heat Kernel and Green Function of the Generalized
  Hermite Operator, and the Abstract Cauchy Problem for the
  Abstract Hermite Operator ........................................................... 155

V.S. Rabinovich
  Local Exponential Estimates for $h$-Pseudo-Differential Operators
  with Operator-Valued Symbols ..................................................... 173
R. DeLeo, T. Gramchev and A. Kirilov
Global Solvability in Functional Spaces for Smooth Nonsingular Vector Fields in the Plane ................................. 191

Y. Chiba
Fuchsian Mild Microfunctions with Fractional Order and their Applications to Hyperbolic Equations ......................... 211

W. Ichinose
The Continuity of Solutions with Respect to a Parameter to Symmetric Hyperbolic Systems ................................. 219

K. Benmeriem and C. Bouzar
Generalized Gevrey Ultradistributions and their Microlocal Analysis ............................................................. 235

L. Cohen
Weyl Rule and Pseudo-Differential Operators for Arbitrary Operators ............................................................ 251

L. Galleani
Time-Frequency Characterization of Stochastic Differential Equations ............................................................ 265

P. Boggiatto, E. Carypis and A. Oliaro
Wigner Representations Associated with Linear Transformations of the Time-Frequency Plane ............................. 275

E. Cordero and F. Nicola
Some Remarks on Localization Operators ............................... 289