

Contents

Israel Gohberg Memorial Session	ix
<i>L. Rodman</i>	
Research Work of Israel Gohberg	xvii
<i>S. Abramovich and L.-E. Persson</i>	
Some New Refined Hardy Type Inequalities with Breaking Points $p = 2$ or $p = 3$	1
<i>Yu. Arlinskiĭ and S. Belyi</i>	
Non-negative Self-adjoint Extensions in Rigged Hilbert Space	11
<i>A. Barreras and J.M. Peña</i>	
Matrices with Bidiagonal Decomposition, Accurate Computations and Corner Cutting Algorithms	43
<i>A. Barton and S. Mayboroda</i>	
Boundary-value Problems for Higher-order Elliptic Equations in Non-smooth Domains	53
<i>M. Bendaoud and M. Sarih</i>	
Additive Maps Preserving the Inner Local Spectral Radius	95
<i>L.F. Campos, A.B. Lebre and J.S. Rodríguez</i>	
On some Generalized Riemann Boundary Value Problems with Shift on the Real Line	103
<i>G. Cassier and J. Verliat</i>	
Generalized Extremal Vectors and Some New Properties	117
<i>F. Colonna and M. Tjani</i>	
Weighted Composition Operators from the Analytic Besov Spaces to BMOA	133
<i>R.G. Douglas and K. Wang</i>	
Some Remarks on Essentially Normal Submodules	159
<i>S.R. Garcia and C. Hammond</i>	
Which Weighted Composition Operators are Complex Symmetric?	171

<i>S.R. Garcia, W.T. Ross and W.R. Wogen</i> C^* -algebras Generated by Truncated Toeplitz Operators	181
<i>S. Geftter and T. Stulova</i> On Some Vector Differential Operators of Infinite Order	193
<i>J.F. Glazebrook</i> Wiener–Hopf Type Operators and Their Generalized Determinants	205
<i>M. González</i> Tauberian Operators. Properties, Applications and Open Problems	231
<i>H. Guediri</i> Products of Toeplitz and Hankel Operators on the Hardy Space of the Unit Sphere	243
<i>M. Harju and V. Serov</i> Three-dimensional Direct and Inverse Scattering for the Schrödinger Equation with a General Nonlinearity	257
<i>A.Yu. Karlovich and I.M. Spitkovsky</i> The Cauchy Singular Integral Operator on Weighted Variable Lebesgue Spaces	275
<i>B.A. Kats</i> Extension of Certain Distributions on Weighted Hölder Space and the Riemann Boundary Value Problem for Non-rectifiable Curves	293
<i>G. Krishna Kumar and S.H. Kulkarni</i> An Analogue of the Spectral Mapping Theorem for Condition Spectrum	299
<i>M. Loaiza and A. Sánchez-Nungaray</i> Commutative Algebras of Toeplitz Operators on the Super Upper Half-plane: Quasi-hyperbolic and Quasi-parabolic Cases	317
<i>F. Martin and E. Wegert</i> Computing the Hilbert Transform in Wavelet Bases on Adaptive Grids	337
<i>K. Matsuoka</i> B_σ -Campanato Estimates for Commutators of Calderón–Zygmund Operators	357
<i>Y. Abu Muhanna and E.-B. Yallaoui</i> Composition Operators on Large Fractional Cauchy Transform Spaces	371

<i>A. Perälä, A. Schuster and J.A. Virtanen</i>	
Hankel Operators on Fock Spaces	377
<i>R. Picard and B.A. Watson</i>	
Evolutionary Problems Involving Sturm–Liouville Operators	391
<i>S.C. Power</i>	
Crystal Frameworks, Matrix-valued Functions and Rigidity Operators	405
<i>E. Rela</i>	
Refined Size Estimates for Furstenberg Sets via Hausdorff Measures: A Survey of Some Recent Results	421
<i>A. Sahmurova and V.B. Shakhmurov</i>	
Singular Degenerate Problems Occurring in Atmospheric Dispersion of Pollutants	455
<i>A. Sergeev</i>	
Harmonic Spheres Conjecture	463
<i>D.T. Stoeva and P. Balazs</i>	
Riesz Bases Multipliers	475
<i>A. Torokhti</i>	
Operator Approximation for Processing of Large Random Data Sets	483
<i>A.A. Vladimirov and I.A. Sheipak</i>	
On Spectral Periodicity for the Sturm–Liouville Problem: Cantor Type Weight, Neumann and Third Type Boundary Conditions	509
<i>V.V. Vlasov and N.A. Rautian</i>	
Spectral Analysis and Representations of Solutions of Abstract Integro-differential Equations in Hilbert Space	517