

Contents

M. Gil'

ESTIMATES FOR FRACTIONAL POWERS AND LOGARITHM OF OPERATORS
WITH HILBERT-SCHMIDT RESOLVENTS AND PERTURBATION RESULTS 607

M.S. Al-Muhja, H. Akhadkulov, N. Ahmad

EQUIVALENCE OF WEIGHTED DT-MODULI OF CONVEX FUNCTIONS 621

El K.M. Said, A. Zertiti

SOME VARIANTS OF THE CONTRACTION
MAPPING PRINCIPLE FOR COMPARABLE ELEMENTS 633

K. Nantomah

A HARMONIC MEAN INEQUALITY FOR
THE EXPONENTIAL INTEGRAL FUNCTION 647

B. Kalimbetov, V. Safonov, E. Madikhan

SINGULARLY PERTURBED INTEGRAL EQUATIONS
WITH A RAPIDLY OSCILLATING INHOMOGENEITY 653

G. Paşa

THREE-LAYER HELE-SHAW DISPLACEMENT
WITH AN INTERMEDIATE NON-NEWTONIAN FLUID 669

N.S. Imanbaev, Y. Kurmysh

ON COMPUTATION OF EIGENFUNCTIONS OF COMPOSITE
TYPE EQUATIONS WITH REGULAR BOUNDARY VALUE CONDITIONS 681

K. Subramani, P. Palani

STABILITY OF BINET-CAUCHY FUNCTIONAL
EQUATION ON NON-ARCHIMEDEAN BANACH ALGEBRAS 693

K. Kordov

TEXT ENCRYPTION ALGORITHM FOR
SECURE COMMUNICATION 705

M. Raïssouli, M. Chergui

SOME INEQUALITIES FOR AN EXTENDED BETA FUNCTION 721

A.M. Musayev

BOUNDEDNESS OF COMMUTATORS OF AN OSCILLATORY INTEGRAL
OPERATORS IN VARIABLE EXPONENT MORREY SPACES 745

D. Kumar

ON FRAMES AND CONE ADAPTED
IRREGULAR SHEARLET COEFFICIENTS 761

A. Bandura, L. Shegda, O. Skaskiv, L. Smolovyk

SOME CRITERIA OF BOUNDEDNESS OF L -INDEX IN A DIRECTION
FOR SLICE HOLOMORPHIC FUNCTIONS IN THE UNIT BALL 775

E. Hincal, B. Kaymakamzade, N. Gokbulut

HUMIDITY LEVEL ON COVID-19 WITH CONTROL STRATEGIES 795

A. Khan, H. Chaudhary

STABILITY ANALYSIS OF CHAOTIC NEW HAMILTONIAN SYSTEM BASED ON
HÉNON-HEILES MODEL USING ADAPTIVE CONTROLLED HYBRID
PROJECTIVE SYNCHRONIZATION 803
