

TABLE OF CONTENTS, JOURNAL OF APPLIED FUNCTIONAL ANALYSIS,

VOLUME 4, NO.1, 2009

ON THE GREEN FUNCTION OF THE OPERATOR RELATED TO THE BESSEL-

HELMHOLTZ OPERATOR AND THE BESSEL KLEIN-GORDON OPERATOR,

C. BUNPOG, A. KANANTHAI,.....10

MEASURES OF SMALLNESS IN A BANACH SPACE, C.DONNINI,.....20

ASYMPTOTIC ANALYSIS OF A PARABOLIC PROBLEM WITH RAPIDLY VARYING

TYPE OF BOUNDARY CONDITIONS IN A THICK TWO-LEVEL JUNCTION,

T. DURANTE,.....33

WEIGHTED SIMULTANEOUS APPROXIMATION BY LEFT GAMMA QUASI-

INTERPOLANTS, H. JIANG, S. GUO,.....48

NON-UNIFORM SAMPLING PROBLEM, S. KULKARNI, R. RADHA,

S. SIVANANTHAN,.....58

COMMON FIXED POINT THEOREMS IN IF-METRIC SPACES, S.KUTUKCU,.....75

TABLE OF CONTENTS, JOURNAL OF APPLIED FUNCTIONAL ANALYSIS,

VOLUME 4, NO.1, 2009, continued from inside back cover

ANALYSIS OF THE FACTORS INFLUENCING MOMENTUM PROFITS, A.BIGLOVA,

S.RACHEV, S.STOYANOV, S. ORTOBELLİ,.....81

EXISTENCE AND UNIQUENESS OF SOLUTIONS TO A DIFFUSIVE PREDATOR-PREY

MODEL, M. ABUALRUB,.....107

SIMULTANEOUS APPROXIMATION IN OPERATOR AND TENSOR PRODUCT

SPACES, E. ABU-SIRHAN, R. KHALIL,.....112

WEAK COMPATIBILITY AND FIXED POINT THEOREMS IN FUZZY METRIC SPACE

USING IMPLICIT RELATION, S. SHARMA, G. TIWARI,.....122

CONTROLLABILITY OF NONLINEAR INFINITE NEUTRAL FUNCTIONAL

DIFFERENTIAL SYSTEMS, R. UMANA,130

ON INFINITE ORDER K-DV HIERARCHIES, L. ZAMPOGNİ,.....140

TOPOLOGICAL SEQUENCE ENTROPY OF OPERATORS ON FUNCTION

SPACES,G.ZHANG, F.ZENG, K.YAN,.....171

TABLE OF CONTENTS, JOURNAL OF APPLIED FUNCTIONAL ANALYSIS,
VOLUME 4, NO.2, 2009

PREFACE,.....	192
APPLICATION OF HOMOTOPY PERTURBATION METHOD TO NONLINEAR OSCILLATOR DIFFERENTIAL EQUATIONS, A.BARARI, F.FARROKHZAD, A. JANALIZADEH, D.D.GANJI,.....	193
ESTIMATING FRACTAL DIMENSION OF FINANCIAL RETURNS USING STABLE DISTRIBUTIONS, N.ALPTEKIN,.....	205
CAPUTO FRACTIONAL OSTROWSKI TYPE INEQUALITIES, G.A.ANASTASSIOU,.....	218
A CHAOTIC COMMUNICATION SYSTEM WITH ENHANCED SECURITY FEATURES, I.P.ANTONIADES, A.N.MILIOU, S.G.STAVRINIDES, A.N.ANAGNOSTOPOULOS,.....	237
ESTIMATING CHAOS AND COMPLEX DYNAMICS IN AN AUTONOMOUS FOUR-DIMENSIONAL CIRCUIT, M. S.PAPADOPOULOU, I.N. STOUBOULOS, I.M. KYPRIANIDIS, A.N.ANAGNOSTOPOULOS,.....	249
NONLINEAR TIME SERIES ANALYSIS OF THE CURRENT THROUGH PEG-SI THIN FILMS UNDER VARYING RELATIVE HUMIDITY, K.ATAK, O.AYBAR, A.HACINLIYAN, G.SAHIN, Y.SKARLATOS,.....	259
THE SOLUTIONS OF BRATU-TYPE PROBLEMS BY HE'S HOMOTOPY PERTURBATION METHOD, A.YILDIRIM,.....	265
COMPARATIVE STUDY BETWEEN SISCON AND MATLAB IN PYROLYSIS REACTOR IDENTIFICATION, M.AZZOUI,.....	273
EARTHQUAKE HAZARD ASSESSMENT FOR DIFFERENT REGIONS IN AND AROUND TURKEY BASED ON GUTENBERG-RICHTER PARAMETERS BY THE LEAST SQUARE METHOD, Y.BAYRAK, S.OZTURK, H.CINAR, G.CH.KORAVOS, T.M.TSAPANOS,.....	286

TABLE OF CONTENTS, JOURNAL OF APPLIED FUNCTIONAL ANALYSIS,
VOLUME 4, NO.2, 2009, continued from inside back cover

APPLICATION OF HOMOTOPY PERTURBATION METHOD AND VARIATIONAL ITERATION METHOD TO A NONLINEAR DIFFUSION EQUATION WITH A REACTION TERM, A.BARARI, A.JANALIZADEH, F.FARROKHZAD, D.D.GANJI,.....	300
FRACTIONAL HALF-TANGENT OF A CURVE DESCRIBED BY ITERATED FUNCTION SYSTEMS, H.BENSOUDANE, C.GENTIL, M.NEVEU,.....	311
CONTROL WITH KAPITZA'S AVERAGING FOR CHAOTIC SYSTEMS, S.BORISENOK,.....	327
STUDY OF THE BIDIRECTIONAL SYNCHRONIZATION OF TWO IDENTICAL FOUR-DIMENSIONAL NONLINEAR SYSTEMS, M.S.PAPADOPOULOU, I. M.KYPRIANIDIS, I.N.STOUBoulos, A.N.ANAGNOSTOPOULOS,.....	337
A CLASSICAL ITERATION METHOD SOLUTION FOR NONLINEAR OSCILLATORS WITH/WITHOUT DISCONTINUITIES A.YILDIRIM,.....	347

TABLE OF CONTENTS, JOURNAL OF APPLIED FUNCTIONAL ANALYSIS,
VOLUME 4, NO.3, 2009

PREFACE,.....	372
A VISUAL BASIC SOFTWARE FOR COMPUTING OF THE ONE-DIMENSIONAL HEAT EQUATION BY USING B-SPLINE SOLUTION, H.CAGLAR, L.CUHACI, N.CAGLAR, M.OZER,.....	373
SOLUTION OF BEAM DEFORMATION EQUATION USING PERTURBATION AND HOMOTOPY PERTURBATION METHODS, A.J.CHOOBASTI, F.FARROKHZAD, A.K.MOOSAVI, A.BARARI, D.D.GANJI,.....	392
THE ‘CHAOSMOTIC’ AND ENTROPIC SITUATIONS OF CONTEMPORARY ART MUSEUMS, D.BALIK,.....	400
GENERATION OF CHAOTIC OSCILLATIONS IN DYNAMICAL SYSTEM WITH FIELD-EFFECT TRANSISTOR AS AN ACTIVE ELEMENT, A.S.DMITRIEV, E.V.EFREMOVA, L.V.KUZMIN, A.N.MILIOU, S.G.STAVRINIDES,...	409
ANALYSIS OF WAVE EQUATION IN PILES DURING IMPACT DRIVING USING APPROXIMATE METHODS , F.FARROKHZAD, A.J.CHOOBASTI, A.BARARI, D.D.GANJI,.....	417
ERGODICITY OF NONLINEAR TRANSFORMATIONS, N.N.GANIKHODJAEV,.....	430
IDENTIFICATION OF AN ATTRACTOR IN THE NONLINEAR RESPONSES OF THE HEAD AT SMALL AMPLITUDES, S.GURSES,.....	434
ON THE APPROXIMATE EXPLICIT SOLUTION OF LINEAR AND NON-LINEAR NON-HOMOGENEOUS DISSIPATIVE WAVE EQUATIONS, S.HA.HASHEMI.K., N.TOLOU, A. BARARI,A.J.CHOOBASTI,.....	449
ECOLOGICAL COMPLEXITY: A HEURISTIC EXPLANATION OF FOURTH DIMENSION OF LIFE, J.H.HE,.....	459

TABLE OF CONTENTS, JOURNAL OF APPLIED FUNCTIONAL ANALYSIS,
VOLUME 4, NO.3, 2009, continued from inside back cover

FUTALOGNKOSAURUS DUKEI: COST AND BENEFIT OF BEING THE BIGGEST, J.H.HE, Q.YANG, L.F. MO,.....	470
COMPLEX EVOLUTION OF BUILT ENVIRONMENT, H.S.KAYA, F.BOLEN,.....	475
THE NEW CLASS OF SUPER-IMPLICIT SECOND DERIVATIVE MULTISTEP METHODS FOR STIFF SYSTEMS, M.M.KHALSARAYI, M.Y.R.ARDABILI, G.HOJJATI,.....	492
SOLVING SYSTEMS OF NON-LINEAR VOLTERRA INTEGRO-DIFFERENTIAL EQUATIONS BY USING AN OPERATIONAL METHOD, A.KHANI, S.SHAHMORAD,.....	501
MODELING OF MULTILANE HIGHWAY TRAFFIC WITH AN AUXILIARY LANE, M.L.KURNAZ, A.N.İMREM, H.T. KING,.....	510
BIFURCATION SCENARIOS OF SOME MODIFIED PREDATOR – PREY NONLINEAR SYSTEMS, I.KUSBEYZI, A.HACINLIYAN,.....	519
SOLUTION OF STRONGLY NONLINEAR OSCILLATION SYSTEMS USING VARIATIONAL APPROACH, S.HA.HASHEMI.K., A.BARARI, N.TOLOU, D.D.GANJI,.....	528
ONE BIQUATERNION MODEL OF ELECTRO-GRAVYMAGNETIC FIELD, A.LYUDMILA A.,.....	536
ON THE GRAVITATIONAL COLLAPSE OF RELATIVISTIC BINARY PULSARS, K.MAMEHRASHI,.....	544

TABLE OF CONTENTS, JOURNAL OF APPLIED FUNCTIONAL ANALYSIS,
VOLUME 4, NO.4, 2009

PREFACE,.....	568
THE APPLICATION OF FRACTAL ANALYSIS AND SPATIAL TECHNOLOGIES FOR URBAN ANALYSIS, M.A. MCADAMS,.....	569
ON INFINITE DIMENSIONAL VOLTERRA TYPE OPERATORS, F.MUKHAMEDOV, M.SABUROV,.....	580
FORCED VIBRATIONS OF A GENERAL CUBIC NONLINEAR CONTINUOUS SYSTEM, B.B.OZHAN, M.PAKDEMIRLI,.....	589
PRECURSORY SEISMIC QUIESCENCE BEFORE 1 MAY 2003 BINGOL (TURKEY) EARTHQUAKE: A STATISTICAL EVALUATION, S.OZTURK, Y.BAYRAK,.....	600
CONSTRUCTION OF CRYPTOGRAPHIC HASH FUNCTIONS BASED ON TIME AVERAGE CHAOTIC MAP, M.RAGULSKIS, Z.NAVICKAS, L.SAUNORIENE, K.LUKOSEVICIUTE,.....	611
SPATIOTEMPORAL CHAOS AND BREAK UP OF SPIRAL WAVES DUE TO CORE EXPANSION IN EXCITABLE MEDIA, H.SABBAGH,.....	623
NON CORPUS PARAMETRIZATION FOR STUDYING LONG-RANGE CORRELATIONS IN NATURAL LANGUAGES, G.SAHIN, O.O.AYBAR, A.HACINLIYAN,.....	636
TWO DIMENSIONAL PACKING OF GRANULAR RODS, S. SARIKAYA, Y. DEMIRAGAC, M.L. KURNAZ,.....	642
TRANSVERSE VIBRATION CHARACTERISTICS OF EULER-BERNOULLI AND TIMOSHENKO BEAMS UNDER MOVING FORCES, A.D.SENALP, A.ARIKOGLU, I.OZKOL, V.Z. DOGAN,.....	648

TABLE OF CONTENTS, JOURNAL OF APPLIED FUNCTIONAL ANALYSIS,
VOLUME 4, NO.4, 2009, continued from inside back cover

A NEW METHOD FOR APPROXIMATE SOLUTION OF SECOND ORDER DIFFERENTIAL EQUATIONS IN THE REGULAR SINGULAR POINTS, A.S.SHAMLOO,.....	662
FINITE ELEMENT ANALYSIS OF DISK BRAKE SQUEAL PHENOMENON, N.TOLOU, M.H.HOJJATI,.....	671
ANALYTICAL INVESTIGATION OF STRONGLY NONLINEAR NORMAL MODE USING HOMOTOPY PERTURBATION METHOD AND HE'S VARIATIONAL METHOD, N.TOLOU, S.HA.HASHEMI.K., A.BARARI, D.D.GANJI,.....	682
LONG MEMORY ANALYSIS OF TURKISH INFLATION SERIES, N.CAGLARIRMAK USLU, N.ALPTEKIN,.....	691
EXPERIMENTAL STUDY OF THE DYNAMIC BEHAVIOR OF A DOUBLE SCROLL CIRCUIT, C.K.VOLOS, I.M.KYPRIANIDIS, I.N.STOUBOULOS, A.N.ANAGNOSTOPOULOS.....	703
DISCONTINUOUS NANOFIBERS BY ELECTROSPINNING, L.XU, J.H.HE,.....	712
FURTHER GENERALIZATION OF QUASILINEARIZATION METHOD WITH INITIAL TIME DIFFERENCE, C.YAKAR, A.YAKAR,.....	714
DETERMINATION OF CHAOTIC BEHAVIOUR IN AORTIC DOPPLER SIGNAL DYNAMICS USING CORRELATION DIMENSION ANALYSIS, D.YILMAZ, N.F.GULER, N.K.TOKEL,.....	728