

MMA2018 – Sigulda – Program 23.05.2018.		
Tuesday, May 29		
11.00-13.00	Registration, hotel “Sigulda”	
13.00-14.00	Lunch, hotel “Sigulda”	
14.00-14.20	Opening, hall “Sigulda”	
	Plenary session, hall “Sigulda” Chairman Strautins U.	
14.20-15.20	DISCUSION: VISION ON MATHEMATICAL MODELLING AND NUMERICAL SIMULATION GREETINGS TO PROFESSOR HARIJS KALIS	
	Hall “Sigulda” Chairman Kolyshkin A.	Hall “Krimulda” Chairman Radin M.
15.30-15.50	Lācis S., Cīmurs J., Ērglis K., Kitenbergs G. THE HIGH ACCURACY EVALUATION OF INTEGRALS ON A PLANAR TRIANGLE	Jasinski A., Muite B. CORRELATIONS BETWEEN THE GRAPH 500 AND HPCG BENCHMARKS
15.50-16.10	Buikis A., Aldersons A. DISCOVERY ASSUMPTION FOR TIME REGISTRATION IN THE HEART RATE VARIABILITY	Kulikov A., Kulikov D. DELAY AND SPATIAL EFFECTS IN MACROECONOMIC MATHEMATICAL MODELS
16.10-16.30	Kalis H., Kangro I. CAM WITH SPECIAL TYPE SPLINES FOR SOLVING NONSTATIONARY DIFFUSION-CONVECTION PROBLEMS	Ozoliņš A. DYNAMIC PROGRAMMING APPROACH FOR SHOP SCHEDULING PROBLEMS
16.30-16.50	Coffee break	
16.50-17.10	Lavrova O., Polevikov V. NUMERICAL MODELLING OF MAGNETIC SHIELDING BY A CYLINDRICAL FERROFLUID LAYER	Carkovs J., Goldšteine J. ASYMPTOTIC STOCHASTIC ANALYSIS FOR ISOLATED POPULATION GROWTH
17.10-17.30	Čiegis R., Suboč O. NUMERICAL SIMULATION OF FEEDBACK CONTROLLERS FOR SOME BIOREACTORS	Breidaks J. AT-RISK-OF-POVERTY TRESHOLD VARIANCE ESTIMATION USING SMOOTHING SPLINES IN R PACKAGE VARDPOOR

17.30-17.50	Gritsans A., Yermachenko I. PERIODIC SOLUTIONS OF A CLASS OF THE SECOND ORDER HAMILTONIAN SYSTEMS	Hilkevics S., Hilkevica G. T-, V-, AND S-RISKS IN PORTFOLIO THEORY
17.50-18.10	Barmina I., Kalis H., Kolmickovs A., MarinakiM., Ozola L., Strautins U., Valdmanis R., Zake M. MATHEMATICAL MODELLING AND EXPERIMENTAL STUDY OF COFIRING STRAW WITH GAS	Wilinski A. FEATURE SELECTION ALGORITHM FOR REFERENCE SET REDUCTION
18.10-18.30	Ozola L., Strautins U. MODELING COMBUSTION PROCESS OF BIOMASS MIXTURES USING ANSYS	
19.00-	Welcome Party, hotel “Sigulda”	
Wednesday, May 30		
	Plenary session, hall “Sigulda” Chairman Funaro D.	
9.00-9.50	Sapa L., Božek B., Danielewski M., Tkach-Šmiech K. MATHEMATICAL, NUMERICAL AND PHYSICAL ANALYSIS OF SOME INTERDIFFUSION MODEL	
9.50-10.40	Piskarev S. APPROXIMATION OF FRACTIONAL SEMILINEAR EQUATIONS	
10.40-11.00	Coffee break	
	Hall “Sigulda” Chairman Rodrigo C.	Hall “Krimulda” Chairman Gritsans A.
11.00-11.20	Fatone L., Funaro D. HIGH-ORDER SEMI-LAGRANGIAN METHODS FOR THE VLASOV- POISSON EQUATIONS IN PLASMA PHYSICS	Jakubeliene K., Stikonienė O.,Čiupaila R., Sapagovas M. THE M-MATRICES AND CONVERGENCE OF FINITE DIFFERENCE METHOD FOR ELLIPTIC EQUATIONS WITH NONLOCAL BOUNDARY CONDITION
11.20-11.40	Janavičius A., Jurgaitis D., Turskiene S. MODELING OF NONLINEAR THERMODIFFUSION AT SPHERICAL SYMMETRIC SOURCE	Paukštaite G., Štikonas A. THE MINIMUM NORM LEAST SQUARES SOLUTION TO

		DIFFERENTIAL NONLOCAL PROBLEMS
11.40-12.00	Kolyshkin A., Koliskina V. LINEAR INSTABILITY OF A STEADY CONVECTIVE MOTION IN A TALL CIRCULAR CYLINDER	Sergejeva N., Pečiulyte S. ON FUCIK TYPE SPECTRUM FOR SOME PROBLEM WITH NONLOCAL BOUNDARY CONDITION
12.00-12.20	Kolyshkin A., Koliskina V., Volodko I. THE INFLUENCE OF THE FIRST-ORDER EXOTHERMAL REACTION ON THE CONVECTIVE STABILITY OF A FLOW IN VERTICAL CYLINDERS	Bingele K., Štikonas A. STURM–LIOUVILLE PROBLEM WITH TWO-POINT NONLOCAL BOUNDARY CONDITION
12.20-12.40	Polevikov V., Tobiska L. NUMERICAL STUDY OF THE INTERACTION OF PARTICLE MAGNETOPHORESIS AND SECONDARY FLOW IN A MAGNETIC-FLUID SEAL	Štikonas A. STURM–LIOUVILLE PROBLEM WITH INTEGRAL CONDITION AND SPECTRUM CURVES
12.40-13.00	Lomonosov T. VERIFICATION OF ENTROPIC QGD-SCHEMES FOR 1D GAS DYNAMICS EQUATIONS	Atslega S., Sadyrbaev F. ON A DIFFERENTIAL SYSTEM ARISING IN NETWORKS REGULATION THEORY
13.00-13.20	Leonavičiene T., Čiegis R., Kleiza J. ON FLUID-SOLID ADSORPTION MODEL	Radin M. RULKOV AND IZHIKEVICH NEURON MODEL
13.20-14.30	Lunch, hotel “Sigulda”	
14.30-	Excursion	
Thursday, May 31		
	Plenary session, hall “Sigulda” Chairman Čiegis R.	
9.00-9.50	Rodrigo C., Gaspar F.J. MULTIGRID WITH SPACE-TIME CONCURRENCY FOR SOLVING PARABOLIC PDES. APPLICATION TO THE TIME-FRACTIONAL HEAT EQUATION	
9.50-10.40	Zlotnik A. ON NUMERICAL SIMULATION OF SPIRAL–VORTICAL STRUCTURES IN ROTATING GASEOUS DISKS	
10.40-11.00	Coffee break	
	Hall “Sigulda”	Hall “Krimulda”

	Chairman Zlotnik A.	Chairman Rimkevičiene A.
11.00-11.20	Šlekas G., Čiegis R., Kancleris Ž. THE COMPARISON OF MATHEMATICAL MODELS FOR EVALUATION OF PHOTOCURRENT IN A PHOTOCONDUCTIVE TERAHERTZ ANTENNA	Laurinčikas A. APPROXIMATION OF ANALYTIC FUNCTIONS BY SHIFTS OF THE RIEMANN AND HURWITZ ZETA- FUNCTIONS
11.20-11.40	Prokopenya A. MODELLING GENERALIZED ATWOOD'S MACHINE WITH THREE DEGREES OF FREEDOM	Balčiūnas A., Dubickas A., Laurinčikas A. ON THE HURWITZ ZETA- FUNCTION WITH ALGEBRAIC IRRATIONAL PARAMETER
11.40-12.00	Kozera R., Noakes L. NATURAL CUBIC SPLINES AND OPTIMAL KNOTS SELECTION FOR REDUCED DATA	Garbaliuskiene V., Karaliūnaite J. ON ZEROS OF CERTAIN COMPOSITIONS OF PERIODIC ZETA-FUNCTIONS
12.00-12.20	Kriauziene R., Bugajev A., Čiegis R. A THREE-LEVEL PARALLELISATION ALGORITHM FOR OPTIMISATION PROBLEMS	Garbaliuskiene V., Stoncelis M. ON WEIGHTED UNIVERSALITY FOR COMPOSITE FUNCTIONS OF PERIODIC ZETA-FUNCTIONS
12.20-12.40	Malolepszy T. VOLTERRA INTEGRAL EQUATIONS IN THE NONLINEAR DIFFUSION THEORY	Macaitiene R. ZEROS OF THE RIEMANN ZETA- FUNCTION AND ITS UNIVERSALITY
12.40-13.00	Vasilyev V. ON SOME PROPERTIES OF CERTAIN DISCRETE OPERATORS	Mochov D., Laurinčikas A. ON DISCRETE UNIVERSALITY OF THE PERIODIC HURWITZ ZETA- FUNCTION WITH RATIONAL PARAMETER
13.00-14.20	Lunch, hotel "Sigulda"	
	Plenary session, hall "Sigulda" Chairman Šostaks A.	
14.20-15.10	Mesiar R. HISTORY AND RECENT RESULTS ON INTEGRATION WITH RESPECT TO MONOTONE MEASURES	
15.10-16.00	Šlapal J. MODELING CONNECTEDNESS IN DIGITAL SPACES BY PATH- PARTITION INDUCED CLOSURE OPERATORS ON GRAPHS	
16.00-16.20	Coffee break	

	Hall “Sigulda” Chairman Šlapal J.	Hall “Krimulda” Chairman Laurinčikas A.
16.20-16.40	Janno J., Kinash N. INVERSE PROBLEM TO DETERMINE AN ORDER OF DERIVATIVE AND A SOURCE TERM IN A TIME FRACTIONAL DIFFUSION EQUATION FROM FINAL MEASUREMENTS	Rimkevičiene A. A GENERALIZED LIMIT THEOREM FOR THE PERIODIC HURWITZ ZETA-FUNCTION
16.40-17.00	Kinash N., Janno J. INVERSE PROBLEMS FOR A SUBDIFFUSION EQUATION WITH FINAL OVERDETERMINATION	Šiaučiunas D., Laurinčikas A. DISCRETE UNIVERSALITY OF ZETA-FUNCTIONS OF CERTAIN CUSP FORMS
17.00-17.20	Kalina M. ON PRE-ORDER GENERATED BY UNINORMS ON BOUNDED POSETS	Šiaučiunas D., Mincevič A. JOINT UNIVERSALITY FOR LERCH ZETA-FUNCTIONS
17.20-17.40	Mesiar R., Kolesarova A. PSEUDO-ADDITIVE AGGREGATION FUNCTIONS OF ORDER K	Vadeikis G. THE WEIGHTED UNIVERSALITY OF THE HURWITZ ZETA- FUNCTION
17.40-18.00	Stupnanova A. AGGREGATION BASED ON PENALTIES AND ON DEVIATIONS	Vaiginyte A. ON THE EXTENSION OF UNIVERSALITY FOR ZETA- FUNCTION OF CERTAIN CUSP FORMS
18.00-18.20	Šostak A. MANY-VALUED MEASURES OF ROUGH APPROXIMATION OF L- FUZZY SETS	Gaiko V. GLOBAL BIFURCATIONS OF LIMIT CYCLES IN MULTI-PARAMETER DYNAMICAL SYSTEMS
19.00-	Conference dinner, hotel “Ezeri”	
Friday, June 1		
	Plenary session, hall “Sigulda” Chairman Raus T.	
9.00-9.50	Sadyrbaev F., Brokan E. ON SOLUTIONS OF A SYSTEM OF ORDINARY DIFFERENTIAL EQUATIONS ARISING IN APPLICATIONS	
9.50-10.40	Asmuss S., Budkina N. SMOOTHING SPLINES FOR OPTIMAL CONTROL OF LINEAR DYNAMICAL SYSTEMS	
10.40-11.00	Coffee break	

	Hall "Sigulda" Chairman Asmuss S.	Hall "Krimulda" Chairman Sadyrbaev F.
11.00-11.20	Kokainis M., Asmuss S. APPROXIMATION BY SPLINE- BASED F-TRANSFORMS	Raus T. Q-CURVE METHOD AND TRIANGLE AREA RULE FOR CHOOSING HEURISTIC REGULARIZATION PARAMETER
11.20-11.40	Lāma R. LINEARIZATION OF OPTIMIZATION PROBLEMS WITH FUZZY RELATION CONSTRAINTS	Oja P., Shah G.W. PERIODIC POLYNOMIAL SPLINE HISTOPOLATION
11.40-12.00	Grigorenko O. FUZZY RELATIONS FOR SOLVING MOLP PROBLEMS	Rehman S., Pedas A., Vainikko G. FAST SOLUTION OF WEAKLY SINGULAR FREDHOLM INTEGRAL EQUATIONS OF THE SECOND KIND
12.00-12.20	Uljane I., Šostak A. FUZZY FUNCTIONS AS MORFISMS IN CATEGORY FBORN (L, M)	Kirsiaed I., Oja P., Shah G.W. RATIONAL SPLINE HISTOPOLATION
12.20-12.40	Pukītis M. ANALYSIS IN CRISP AND FUZZY TECHNIQUES IN THE CLASSIFICATION OF MULTISPECTRAL REMOTE SENSING IMAGES	Radin M., Bula I. ABOUT NEURON MODEL WITH PERIODIC INTERNAL DECAY RATE
12.40-13.00	Alijani Z., Kangro U. SMOOTHNESS OF THE SOLUTION FOR FUZZY VOLTERRA INTEGRAL EQUATIONS OF THE SECOND KIND	Dobkevich M., Schukin I. ANALYSIS OF THE BEHAVIOR OF A NONLINEAR DYNAMICAL SYSTEM
13.00-13.20	Reinfelds A., Christian S. VOLTERRA INTEGRAL EQUATION ON UNBOUNDED ABOVE TIME SCALES	Kirichuka A. MULTIPLE SOLUTIONS FOR TWO - POINT BOUNDARY VALU PROBLEMS WITH HETEROCLINICS
13.20-13.40	Closing	
13.40	Lunch, hotel "Sigulda"	