



Third International Conference on Analysis and Applied Mathematics ICAAM 2016

THE PROGRAM

PLENARY LECTURES and SECTIONAL SPEECHES

07-10 September 2016
Institute of Mathematics and Mathematical Modelling
Almaty, Kazakhstan

ABOUT CONFERENCE:

The Third International Conference on Analysis and Applied Mathematics, ICAAM 2016 will be held on September 7-10, 2016 in Almaty, Kazakhstan.

THIS CONFERENCE IS DEDICATED TO 70th BIRTHDAY OF PROF. TYNYSBEK KALMENOV

The aim of the conference is to bring mathematicians working in the area of analysis and applied mathematics together to share new trends of applications in sciences: in fundamental mathematics, in the field of applied mathematics; to open new research areas in analysis and etc. That is why, we plan to found the conference series to provide a forum for researchers and scientists to communicate their recent developments and to present their original results in various fields of analysis and applied mathematics.

The International Conference on Analysis and Applied Mathematics, ICAAM 2012 was first held in Gumushane, Turkey in 2012 (<http://icaam2012.gumushane.edu.tr>).

The Second International Conference on Analysis and Applied Mathematics, ICAAM 2014 was held on September 11-13, 2014 in Shymkent, Kazakhstan (<http://icaam.gumushane.edu.tr/index/>).

The proceedings of extended abstracts of ICAAM 2012 and ICAAM 2014 were published in «AIP Conference Proceedings» (American Institute of Physics), in volumes 1161 and 1470.

The proceedings of extended abstracts of ICAAM 2016 were published in «AIP Conference Proceedings», in volumes 1759 (<http://scitation.aip.org/content/aip/proceeding/aipcp/1759>).

The conference will consist of plenary lectures, mini symposiums and brief oral presentations.

07/09/2016		FIRST DAY - September 07, 2016	
WEDNESDAY		08:30-10:00 REGISTRATION (room 201, Institute of Mathematics and Mathematical Modelling)	
Concert hall of "Gylym Ordasy"			
10:00-10:10	OPENING CEREMONY Chair: Allaberen ASHYRALYEV, Chairperson of ICAAM 2016		
PLENARY LECTURES			
10:10-10:50	Invited Speaker: Prof. Alexander Ivanovich APTEKAREV , The Steklov problem and estimates for orthogonal polynomials	Director of the Keldysh Institute of Applied Mathematics, Moscow, Russia	
10:50-11:30	Invited Speaker: Prof. Alexander Leonidovich SKUBACHEVSKII , Initial-Boundary-Problems for Vlasov-Poisson Equations with Homogeneous Magnetic Field	Peoples Friendship University of Russia, Moscow, Russia	
11:30-11:50	<i>Coffee break</i>		
11:50-12:30	Invited Speaker: Prof. Ljubisa D.R. KOCINAC , Selections, games and Karamata theory	University of Nis, Serbia	
12:30-13:00	Plenary Speaker: Prof. Stanislav Nikolaevich KHARIN , The mathematical model of a vacuum arc in electrical contacts	Institute of Mathematics and Mathematical Modeling, Almaty,	
13:00-14:00	LUNCH		

07/09/2016 WEDNESDAY		FIRST DAY - September 07, 2016				
SECTIONAL SPEECHES						
	Hall 1 (room 306)	Hall 2 (room 208)	Hall 3 (room 201)	Hall 4 (room 409)	Hall 5 (room 401)	
	ANALYSIS 2	APPLIED MATHEMATICS	OTHER TOPICS	MS1: MATHEM. MODELLING	MS2: SPECTRAL THEORY	
14:00-14:15	Marina PLEKHANOVA Sobolev type equations of time-fractional order with periodical boundary conditions	Ozgur YILDIRIM (Turkey) On the analytical solution methods for sine-Gordon equation	Nursadyk AKANBAY Furstenberg type theorem for a multiplicative product of Markov random matrices	Merey SARSENGELDIN Analytical solution of two-phase spherical Stefan problem by heat polynomials and integral error functions	Muvasharkhan JENALIYEV On spectral problems for loaded two-dimension Laplace operator	
14:15-14:30	Arsen PSKHU To the theory of linear ordinary differential equations of fractional order with constant coefficients	Uelker OKUR (Germany) Crank-Nicolson difference scheme for the stochastic parabolic equation with the dependent operator coefficient	Gulmira VASSILINA On stochastic stability of the integral manifold under permanently acting random perturbation	Lyudmila ALEXEYEVA Dynamics of the massif in the vicinity of the tunnel any profile of section under action of transport loadings	Amir SHALDANBAYEV Solution of a singularly perturbed Cauchy problem by the method of spectral decomposition	
14:30-14:45	Batirkhan TURMETOV Solvability of some boundary value problems for Poisson equation in the ball	Sevilay ERDOGAN (Turkey) Numerical solution of the hyperbolic-Schrodinger equation with the multipoint nonlocal boundary condition	Nursadyk AKANBAY On asymptotic normality of solutions of the Cauchy problem of a parabolic equation with random right side	Bolatbek RYSBAIULY Iterative method of finding hydraulic conductivity characteristics of soil moisture	Lyailya ZHAPSARBAYEVA Estimates of the eigenvalues of operator arising in swelling pressure model	
14:45-15:00	Abdullah ERDOGAN Unique solvability of an inverse problem for a semilinear equation with final overdetermination	Deniz AĞIRSEVEN (Turkey) On the stability of the telegraph equation with time delay	Damir KULBAEV Application of the theory of games for selection of effective defense	Tulegen AMANBAEV Modeling and calculation of flotation process in one-dimensional formulation	Bolys SABITBEK An embedding theorem of Sobolev type spaces on stratified Lie groups	
15:00-15:15	Ludmila PULKINA Some Problems with Nonlocal Conditions for Hyperbolic Equations	Hossein Jabbari KHAMNEI (Iran) Recurrence relation for the moments of order statistics from a beta-Pareto distribution	S. SHARIPOV New Economy Form (NEF) as a Plan-Market Economy	Targyn NAURYZ Exact solution of two phase spherical Stefan problem with two free boundaries	Murat RAMAZANOV Spectrum of Volterra integral operator of the second kind	
15:15-15:30	Nurlan DAIRBEKOV Solvability of the Dirichlet problem for the p -Laplacian on stratified sets	Kadriye TURKCAN, Mehmet KOKSAL (Turkey) On Numerical Solutions of Telegraph Equations with the Dirichlet Boundary Condition	Sh. BILALL Weighted inequality of Hardy type	Alibek ISSAKHOV Mathematical modeling of the thermal effect on the aquatic environment from thermal power plant by using two water discharged pipes	Gaukhar AREPOVA A regular problem for an elliptic-parabolic equation with a potential boundary condition	
Chair: Allaberen ASHYRALYEV		Chair: Alexander SKUBACHEVSKII	Chair: Marat TLEUBERGENOV	Chair: Mersaid ARIPOV	Chair: Ziganur FAZULLIN	

15:30-16:00 *Coffee break*

Sept. 7	Hall 1 (room 306)	Hall 2 (room 208)	Hall 3 (room 201)	Hall 4 (room 409)	Hall 5 (room 401)
	ANALYSIS 2	APPLIED MATHEMATICS	OTHER TOPICS	MS1: MATHEM. MODELLING	MS2: SPECTRAL THEORY
16:00-16:15	Zhaksylyk TASMAMBETOV Confluent hyper geometric function and two variables Laguerre polynomials as a solutions of Wilczynski type system	Kanat SHAKENOV Numerical solution in relaxationally-compressed porous environment by Monte Carlo and probability difference methods	Beibut KULPESHOV Binarity for almost w-categorical quite o-minimal theories	Fikret Aliev An asymptotical method for determining hydraulic resistance coefficient of gas-lift process	Baltabek KANGUZHIN A boundary inverse problem of a differential operator with integro-differential boundary conditions
16:15-16:30	Serik ALDASHEV The correctness Dirichlet problem for three-dimensional elliptic equations with type and order extinction	Aigul MANAPOVA Differentiation of the functional in an optimization problem for diffusion and convective transfer coefficients	Assylbek ISSAKHOV Hyperimmunity and A-computable universal numberings	Ainur ZHUMALI A modelling the dynamics of in-situ leaching process at the microscale	Durvudkhan SURAGAN Spectral geometry inequalities for Schatten p -norms of compact operators
16:30-16:45	Anar ASSANOVA On a nonlocal problem with integral conditions for the system of partial differential equations of second order	Meltem UZUN (Turkey) On the numerical solution of sine-Gordon equation	Bektur BAIZHANOV One-types in ordered theories	Aigul KAZHIKENOVA Mathematical modeling of the temperature dependence of molten viscosity of metal according to the concept of chaotized parts	Nurlan IMANBAEV Stability of basis property of a type of problems with nonlocal perturbation of boundary conditions
16:45-17:00	Dinmukhambet SAPAKOV Asymptotics solutions of a singularly perturbed integro-differential problem with rapidly oscillating coefficients	Gulmira ZAKIR'YANOVA Dynamic analogues of Green and Gauss's formulas for unsteady dynamics of anisotropic elastic medium	Tatiana ZAMBARNAYA One-formulas in ordered theories	Samat KASSABEK The mathematical models of electromagnetic field dynamics and heat transfer in closed electrical contacts	Abdizhahan SARSENBI On the basis property of eigenfunctions of second order differential operators with involution
17:00-17:15	Aziza MIRZAKULOVA Asymptotic estimates of the solution of the Cauchy problem for singularly perturbed integro-differential equations	Michael DMITRIEV The near optimality of the stabilizing control in a weakly nonlinear system with state-dependent coefficients	Aibat YESHKEYEV Categorical Jonsson fragments in existentially prime convex Jonsson theory	Nurtoleu SHAKHAN Simulation of shock wave boundary layer interaction in at channel with jet injection	Leonid KRITSKOV, On Spectral Properties of Perturbations of the Operator $-u''(-x)$ with Initial Data
17:15-17:30	Anatoly ATTAEV Boundary value problems for loaded hyperbolic equations	Uzak ZHAPBASBAYEV Optimization of turbulent flow in a radial reactor with fixed bed	Victor VERBOVSKIY Some classes of o-stable structures	Saltanbek MUKHAMBETZHANOV Mathematical modeling of non-equilibrium sorption	Bazarkan BIYAROV Bounded perturbations of the correct restrictions and extensions
17:30-17:45	Muvasharkhan JENALIYEV On a homogeneous parabolic problem in an infinite corner domain	Daulet ALIBIYEV Spreading of flame front I by the predictor-corrector scheme	Cigdem GUNDUZ ARAS A study on intuitionistic fuzzy supra soft topological spaces	Medet INKARBEKOV A new combined DG-MC solver for large eddy simulation of reacting turbulent flows	Nurgissa YESSIRKEGENOV Euler-Hilbert-Sobolev spaces on homogeneous groups
17:45-18:00	Symbat KABDRAKHOVA Algorithm of finding of a solution of linear hyperbolic equation with the mixed derivative	Dossan BAIGEREYEV Numerical solution of an optimal control problem governed by three-phase non-isothermal flow equations	Sadi BAYRAMOV On the Tietze extension theorem in soft topological spaces	Aidyn AITZHAN Implementation of scalar filtered density function for large eddy simulation of turbulent reacting flow	Aidyn A. KASSYMOV An isoperimetric inequality for heat potential and heat equation
	Chair: Arsen PSKHU	Chair: Alexander APTEKAREV	Chair: Bektur BAIZHANOV	Chair: Stanislav KHARIN	Chair: Andrei Shkalikov

08/09/2016

SECOND DAY - September 08, 2016

THURSDAY

SECTIONAL SPEECHES

	Hall 1 (room 306)	Hall 2 (room 208)	Hall 4 (room 409)	Hall 5 (room 401)
	ANALYSIS 2	ANALYSIS 1	MATH. EDUCATION	MS3: DYNAMICAL SYSTEMS
09:00-09:15	Bahriye Karaca (Turkey) A note on the Dirichlet problem for model complex partial differential equations	Kairat MYNBAEV Convergence of kernel density estimators on compact sets	Guldina KAMALOVA Features and advantages of training teachers to use means of informatization to pro le teaching mathematics	Serikbai AISAGALIEV Investigation on absolute stability of regulated systems in a simple critical case
09:15-09:30	Aleksandr KOZHANOV Global solvability in some models related to equations of Sobolev type	Orhan TUG (Iraq) Four-dimensional generalized difference matrix and some double sequence spaces	Indira OMAROVA Formation of project and research skills of students in calculation of limits	Nurlan ABIEV On a dynamical system relating to the Ricci flow on Aloff-Wallach spaces
09:30-09:45	Djamila SEBA (Algeria) Weak solutions for nonlinear fractional differential equations with fractional separated boundary conditions in Banach spaces	Farkhondeh HOSSEINI SHEKARABI (Iran) Operational matrices for finding numerical solution of stochastic differential equations arisen in financial mathematics	Victor KORNILOV Fundamentalization of mathematical knowledge while teaching students inverse and incorrect problem	K.G. GASIMOVA Time frequency method of solving a boundary value problem for a hyperbolic system and its application to the oil extraction
09:45-10:00	Meirkhan BORIKHANOV On construction of solutions of linear fractional differential equations with constant coefficients	Kiomars MOTARJEM (Iran) Analyzing High-Dimensional Survival Data Using Random Forests	Bahytgul KASKATAEVA Methods of professionally-oriented training of complex function theory	Zainel MURZABEKOV Design of PI regulators for dynamic systems with constrained control and fixed endpoints of trajectories
10:00-10:15	Sergey PISKAREV Approximation in time of fractional equations	Erlan NURSULTANOV Summability of the Fourier coefficients of functions from anisotropic Lorentz space	Bektas BOSTANOV Geometric heritage of al-Farabi in education	Mersaid ARIPOV The Fujita type a critical exponent for a double nonlinear parabolic equation and system
10:15-10:30	Alexandr SOLDATOV Integrals with homogeneous - difference kernels on the plane and their applications	Orhan TUG (Iraq) Four-dimensional generalized difference matrix and almost convergent double sequence spaces	Simon SEROVAJSKY History of mathematics and its teaching in higher school	Mikhail TUROV Martinet-Ramis modulus for one Quadratic System

10:30-11:00

Coffee break

Sept. 8	Hall 1 (room 306)	Hall 2 (room 208)	Hall 4 (room 409)	Hall 5 (room 401)
	ANALYSIS 2	ANALYSIS 1	APPLIED MATHEMATICS	MS3: DYNAMICAL SYSTEMS
11:00-11:15	Ermek KHAIRULLIN One special boundary value problem for multidimensional parabolic Integro-differential equation	Yesmukhanbet SMAILOV The Hardy-Littlewood type theorems in Besov spaces with the Haar basis	Simon SEROVAJSKY Inverse problem for the Verhulst equation of limited population growth with discrete experiment data	Ilya SEVRYUGIN Controllability of process described by system of linear integro-differential equations with restrictions
11:15-11:30	Saparbay MASANOV On solvability of boundary value problems for a biharmonic equation with periodic conditions	Dauren BAZARKHANOV Fourier widths of some function classes associated with m -multiple Haar system	Sharypkhan SAKHAEV Solvability of a stationary problem of magnetohydrodynamics	Kuralay YESMAKHANOVA Soliton solutions of the Hirota equation
11:30-11:45	Kordan OSPANOV Nonlocal estimates for solutions of a singular higher order differential equation	Gabdolla AKISHEV Estimations of the best M -term approximations of functions in the Lorentz space	Bakytbek D. KOSHANOV On solvability of boundary value problem of magnetic gas dynamics with symmetries	Zhussip SULEIMENOV The method of accelerated convergence for constructing conditional-periodical solutions
11:45-12:00	Galina BIZHANOVA Solution of the free boundary problem for the parabolic equations with unknown temperature and velocity	YE. TOLEUGAZY Interpolation proper-ties of anisotropic Nikol'skii-Besov spaces and embedding theorems	Djamila ISKENDEROVA Problem with inhomogeneous boundary values for the equations of magnetic elektrogazodinamik	Michael DMITRIEV About the robustness of the middle stabilizing controller for quasi-linear state dependent coefficients discrete systems
12:00-12:15	Mussakan MURATBEKOV On separability of a differential operator of non-classical type in an unbounded domain	Leonid FALALEEV On the properties of operators with the semi-power type lacunas	Ernazar NYSSANOV Modeling and solving an optimization problem of supply of chemical raw materials	Zainel MURZABEKOV Optimal control problem for the three-sector economic model of a cluster
12:15-12:30	Zhanuzak TOKIBETOV About sedately growing solutions of one generalized Cauchy-Riemann system	Gulden KARSHYGINA On the sufficient condition for embedding of generalized Lizorkin-Triebel spaces	Almas TEMIRBEKOV Numerical implementation of the method of fictitious domains for elliptic equations	Guzel BAYBULATOVA Optimal control problem for the degenerate phase field system of equations
12:30-12:45	Dulat DZHUMABAEV Properties of an isolated solution to a nonlinear boundary value problem with parameters	Aizhan YDYRYS On multipliers of Fourier series in the Lorentz space	Auzhan SAKABEKOV Principle of Mass Conservation for the Boltzmann's Moment System in Fourth Approximation	Almat RASKALIYEV Localization of an air target by means of GNSS -based multistatic radar
12:45-13:00	Vladimir VASILYEV On periodic wave factorization	Assylbek ZULKHAZHAY Coercive solvability of degenerate system of second order difference equations	Alexandr PANOV Rank 0 invariant solutions of dynamics of two-phase medium	

13:00-14:00

LUNCH

08/09/2016		SECOND DAY: PLENARY LECTURES	
THURSDAY		Concert hall of "Gylym Ordasy"	
14:00-14:40	Invited Speaker: Academician RAS Iskander Asanovich TAIMANOV , Sobolev Institute of Mathematics, Novosibirsk, Russia The Moutard transformation of two-dimensional Dirac operators and the Mobius geometry		
14:40-15:20	Invited Speaker: Prof. Vasilii Nikolaevich DENISOV , Lomonosov Moscow State University, Moscow, Russia The stabilization rate of a solution to the Cauchy problem		
15:20-15:50	Plenary Speaker: Prof. Rvskul OINAROV , Gumilev Eurasian National University, Astana Additive and multiplicative weighted estimates of intermediate integral operators		
15:50-16:20		<i>Coffee break</i>	
Celebration meeting devoted to honoring Academician of NAS RK Tynysbek Sharipovich KAL'MENOV			
16:20-16:40	Speaker: Prof. Makhmud SADYBEKOV , Institute of Mathematics and Mathematical Modeling, Almaty, Brief scientific biography of Academician of NAS RK Tynysbek Sharipovich KAL'MENOV		
16:40-18:00		Congratulations from colleagues and friends in honor of the 70th anniversary of Academician T. Sh. Kalmenov	
09/09/2016		THIRD DAY - September 09, 2016	
FRIDAY		SECTIONAL SPEECHES	
	Hall 1 (room 306)	Hall 2 (room 208)	Hall 5 (room 401)
	ANALYSIS 3	APPLIED MATHEMATICS	MS2: SPECTRAL THEORY
09:00-09:15	Turdebek N. BEKJAN Noncommutative Holder-type inequalities	Ilya STARODUMOV Modeling of thorium transport by the water flow in the river Kechi-Kemin	Akylbek KERIMBEKOV The resolvent equation of nonlinear Fredholm integral equations
09:15-09:30	Faruk UYGUL (UAE) Multiplier Amenability of Banach Algebras	Amankeldy TURAROV Numerical solution of the multiphase one dimensional model of gas lift process	Abdisalam SARSENBI Green's function of the second order differential operator with involution
09:30-09:45	Nurzhan BOKAYEV On the compactness of set in generalized Morrey spaces	Nikolay MARTYNOV Results of numerical modelling of formation of deep salt diapirism	Ziganur FAZULLIN On spectrum of perturbed two-dimensional harmonic
09:45-10:00	Asghar RANJBARI (Iran) Some properties of linear operators in locally convex cones	Yurii SHPADI On the applicability of Picard's successive approximations to the numerical solving the problem of heat transfer	Daulet NURAKHMETOV Well-posed problems for the Laplace operator in the multiply connected domains
10:00-10:15	Vladimir FEDOROV Initial value problem for a class of fractional order inhomogeneous equations in Banach spaces	Abdigali AKYSH The maximum principle for the Navier-Stokes equations	Mussakan MURATBEKOV On spectral properties of a Shrodinger operator with a negative parameter
10:15-10:30	Alibek YESKERMESSULY About the defect indices of fourth-order differential operator with rapidly oscillating coefficients	Issabek ORAZOV Construction of models of extraction processes with nonlocal conditions by a spatial variable	Kanat TULENOV Duality property of the noncommutative ℓ_∞ and ℓ_1 valued symmetric Hardy spaces
10:30-11:00		<i>Coffee break</i>	
11:00-12:00		POSTER PRESENTATIONS	
Cinema hall of "Gylym Ordasy"			
12:00-12:30	Plenary Speaker: Prof. Azimbay SADULLAEV , National University of Uzbekistan, Tashkent, Uzbekistan Monge-Ampere equation and pluripotential theory		
12:30-13:00	Plenary Speaker: Corr. member of RAS Sergey Igorevich KABANIKHIN , Institute of Computational Mathematics and Mathematical Geophysics, Novosibirsk, Russia Regularization of the Cauchy problem with data given on the part of the boundary		
13:00-14:00		LUNCH	
14:00-14:40	Invited Speaker: Prof. Mikhail Vladimirovich RUZHANSKY , Imperial College London, London, UK, President of the London Mathematical Society Very weak solutions to wave equations		
14:40-15:20	Invited Speaker: Prof. Andrei Andreevich SHKALIKOV , Lomonosov Moscow State University, Moscow, Russia Differential operators with singular coefficients		
15:20-15:50	Plenary Speaker: Prof. Baltabek KANGUZHIN , al-Farabi Kazakh National University, Almaty A correct definition of Laplace operator with delta-shaped potential and its spectral analysis		
15:50-16:20		<i>Coffee break</i>	
16:20-16:50	Plenary Speaker: Prof. Viktor Ivanovich BURENKOV , Peoples Friendship University of Russia, Moscow, Russia The present state of the theory of operators in the general Morrey-type spaces		
16:50-17:20	Plenary Speaker: Prof. Allaberen ASHYRALYEV , Institute of Mathematics and Mathematical Modeling On source identification problem for delay parabolic differential and difference equations		
17:20-18:00		CLOSING CEREMONY	