

Second International Conference
Mathematics in Armenia

Advances and Perspectives

August 24-31, 2013, Tsaghkadzor, Armenia

*Dedicated to the 70th Anniversary of Foundation of
Armenian National Academy of Sciences*

PROGRAMME

24 August

10⁰⁰-18⁰⁰ *Arrival and Registration*

18⁰⁰-20⁰⁰ *Opening Ceremony and Welcome Reception*

25 August

9⁰⁰-10⁰⁰ *Breakfast*

PLENARY LECTURES – Chairman: S. Adian

10⁰⁰-10⁴⁰ A. Razborov, *Flag Algebras*

10⁵⁰-11³⁰ A. Laptev, *Spectral inequalities for Partial Differential Equations and their applications*

11³⁰-12⁰⁰ *Coffee Break*

SECTION A – Chairman: N. Arakelian

12⁰⁰-12¹⁵ Yu. Matiyasevich, *New properties of Riemann's zeta function*

12¹⁵-12³⁰ V. Arestov, *Approximation of the differentiation operator by bounded operators in the space L^2 on a half-line*

12³⁰-12⁴⁵ S. Aleksanyan, *Optimal uniform and tangential approximation by the entire and meromorphic functions*

SECTION B – Chairman: V. Atabekyan

12⁰⁰-12¹⁵ E. Kreines, *Embedded graphs on Riemann surfaces and beyond*

12¹⁵-12³⁰ S. Matveev, *The Diamond Lemma and Prime Decompositions of Global Knots*

12³⁰-12⁴⁵ V. Mikaelian, *Counting abelian subgroups in finitely generated metabelian groups*

SECTION C – Chairman: M. Ginovyan

12⁰⁰-12¹⁵ Yu. Kutoyants, *On the Goodness of Fit Tests for Stochastic Processes*

12¹⁵-12³⁰ B. Gurevich, *On a measure with maximal entropy for a suspension flow over a countable state Markov shift*

12³⁰-12⁴⁵ R. Aramyan, *A solution of the generalized cosine equation in Hilbert's fourth problem*

13⁰⁰-14⁰⁰ *Lunch*

PLENARY LECTURES – Chairman: Yu. Matiyasevich

15⁰⁰-15⁴⁰ S. Adian, *The Burnside Problem on periodic groups for odd exponents $n > 100$*

15⁵⁰-16³⁰ D. Mundici, *Rational polyhedra, unital abelian l -groups, and MV-algebras*

SECTION A – Chairman: U. Goginava

16⁴⁰-16⁵⁵ G. Karagulyan, *On the divergence sets of Walsh-Fourier series of continuous functions*

16⁵⁵-17¹⁰ G. Tephnadze, *On partial sums and Fejer means of Walsh-Fourier series*

17²⁰-17³⁵ S. Episkoposian, *L^1 and uniform convergence of series by the generalized Walsh system*

17³⁵-17⁵⁰ S. Sargsyan, *On the divergence of Fourier-Walsh series*

18⁰⁰-18¹⁵ L. Galoyan, *On the negative order Cesaro means of the Fourier series in the trigonometric and Walsh systems*

SECTION B – Chairman: V. Mazurov

- 16⁴⁰-16⁵⁵ A. Guterman, *On the Polya problem of conversion between permanents and determinants*
16⁵⁵-17¹⁰ D. Lytkina, *Periodic groups acting freely on Abelian groups*
17²⁰-17³⁵ Y. Lytkin, *On groups, critical with respect to a spectrum*
17³⁵-17⁵⁰ V. Khakhanyan, *About Relations of Church Theses and Principles of Uniformizations in the Intuitionistic Set Theory*

SECTION C – Chairman: V. Knopova

- 16⁴⁰-16⁵⁵ V. Ohanyan, *Tomography problems of pattern recognition*
16⁵⁵-17¹⁰ A. Gasparyan, *Covariogram of a parallelogram*
17²⁰-17³⁵ H. Harutyunyan, *Linear and planar sections of convex domains*
17³⁵-17⁵⁰ H. Sukiasyan, *On Random Sections of Octahedra*
18⁰⁰-18¹⁵ N. Aharonyan, *Orientation-dependent chord length distribution function for a convex domain*

19⁰⁰-20⁰⁰ *Dinner*

26 August

9⁰⁰-10⁰⁰ *Breakfast*

PLENARY LECTURES – Chairman: P. Wojtaszczyk

10⁰⁰-10⁴⁰ A.A. Talalyan, *On martingales and integrability criterion of trigonometric series*

10⁵⁰-11³⁰ S. Konyagin, *On Freiman's Theorem*

11³⁰-12⁰⁰ *Coffee Break*

SECTION A – Chairman: G. Karagulyan

12⁰⁰-12¹⁵ U. Goginava and L. Gogoladze, *Convergence of logarithmic means of Multiple Fourier series*

12¹⁵-12³⁰ A. Sahakian, *On multiple Fourier series of functions of bounded partial generalized variation*

12³⁰-12⁴⁵ A. Kobelyan, M. Grigoryan, *On the convergence of hard sampling operators*

SECTION B – Chairman: A. Guterman

12⁰⁰-12¹⁵ V. Mazurov, *Groups with given element orders*

12¹⁵-12³⁰ A. Yashin, *Algebraic models of synchronized switch schemes*

12³⁰-12⁴⁵ H. Mikayelyan, *Asymptotic of the minimizers of the two-dimensional Mumford-Shah functional near the crack-tip*

SECTION C – Chairman: G. Shevchenko

12⁰⁰-12¹⁵ N. Smorodina, *The probabilistic approximation of the one-dimensional initial-boundary value problem solution*

12¹⁵-12³⁰ B. Nahapetian, *The reconstruction of specification by its one-point subsystem and justification for Gibbs formula*

12³⁰-12⁴⁵ L. Khachatryan, *Martingale method in the theory of random fields and its application in statistical physics*

13⁰⁰-14⁰⁰ *Lunch*

PLENARY LECTURES – Chairman: A. Laptev

15⁰⁰-15⁴⁰ P. Souganidis, TBA

15⁵⁰-16³⁰ J. F. Rodrigues, *Variations on a problem of Fichera and Stampacchia*

SECTION A – Chairman: V. Arestov

16⁴⁰-16⁵⁵ P. Glazyrina, *On fractional derivatives of trigonometric polynomials*

16⁵⁵-17¹⁰ A. Gogatishvili, *Boundedness of Stein's spherical maximal function in variable Lebesgue space and application to the wave equation*

17²⁰-17³⁵ A. Karapetyan, *Weighted Integral Representations in Tube Domain over Real Unit Ball*

17³⁵-17⁵⁰ M. Surnachev, *On density of smooth functions in weighted Sobolev-Orlicz spaces*

SECTION B – Chairman: D. Lytkina

- 16⁴⁰-16⁵⁵ Yu. Movsisyan, *Algebras with hyperidentities of lattice varieties*
16⁵⁵-17¹⁰ Yu. Movsisyan, D. Davidova, *Fixed point theorems for quantum-lattices*
17²⁰-17³⁵ A. Ehsani, *On Algebras with Medial-like Hyperidentities*
17³⁵-17⁵⁰ J. Hatami, *Algebras with fuzzy operations and fuzzy equalities*

SECTION C – Chairman: N. Smorodina

- 16⁴⁰-16⁵⁵ Ginovyan M. and Sahakian A., *The Trace Approximation Problem for Toeplitz Operators and Applications*
16⁵⁵-17¹⁰ O. Aryasova and A. Pilipenko, *On differentiability of a flow for an SDE with discontinuous drift*
17²⁰-17³⁵ S. Poghosyan, *Cluster expansions and construction of point processes in statistical mechanics*
17³⁵-17⁵⁰ V. Knopova, *Compound kernel estimates for some Markov processes*
18⁰⁰-18¹⁵ A. Pilipenko, *On the limit behavior of a sequence of Markov processes with irregular behavior at a fixed point*

19⁰⁰-20⁰⁰ *Dinner*

27 August

9⁰⁰-10⁰⁰ *Breakfast*

PLENARY LECTURES – Chairman: G. Gevorkyan

10⁰⁰-10⁴⁰ N. Arakelian, *On some problems and results in the Weierstrass theory of analytic functions*

10⁵⁰-11³⁰ Ya. Sinai, *Ergodic properties of square-free numbers*

11³⁰-12⁰⁰ *Coffee Break*

SECTION A – Chairman: L. Gogoladze

12⁰⁰-12¹⁵ E. Serrano, M. Tropicovsky and M. Fabio, *Solving Deconvolution Problems by Wavelet Decomposition Methods*

12¹⁵-12³⁰ M. Passenbrunner, *Pointwise estimates for spline Gram matrix inverses*

12³⁰-12⁴⁵ R. Saks, *H. Weil orthogonal decomposition of the $L_2(G)$ space and eigenfunctions of the curl operator*

SECTION B – Chairman: V. Grines

12⁰⁰-12¹⁵ S. Orevkov and V. Zvonilov, *Fundamental groups of spaces of trigonal curves*

12¹⁵-12³⁰ G. Polotovskiy, *On the topology of real decomposable algebraic curves*

12³⁰-12⁴⁵ M. Bakuradze, *On some rational and integral complex genera*

SECTION C – Chairman: J. Lewis

12⁰⁰-12¹⁵ R. Koplataдзе, *Essentially Nonlinear Functional Differential Equation with Advanced Argument*

12¹⁵-12³⁰ H. Aleksanyan, H. Shahgholian and P. Sjolín, *Homogenization of Dirichlet problem for divergence type elliptic systems*

12³⁰-12⁴⁵ N. Gorgodze, T. Tadumadze, *Variation Formulas of Solution for Functional Differential Equations Taking Into Account Delay Function Perturbation and Initial Data Optimization Problems*

13⁰⁰-14⁰⁰ *Lunch*

PLENARY LECTURES – Chairman: J.F. Rodrigues

15⁰⁰-15⁴⁰ J. Lewis, *Hausdorff Dimension and σ -Finiteness of Some p -Harmonic Measures*

15⁵⁰-16³⁰ H. Hedenmalm, *Gauss-type operators, intertwining with Hilbert transform, and the Klein-Gordon equation*

SECTION A – Chairman: T. Harutyunyan

16⁴⁰-16⁵⁵ Z. Heidari and A. Pryde, *Uniform continuity and weak almost periodicity on locally compact quantum groups*

16⁵⁵-17¹⁰ E. Bereznoi, *Banach-Steinhaus Theorem for Subspaces*

17²⁰-17³⁵ Sh. Tetunashvili, *On generalization of Sierpinski's universal power series*

17³⁵-17⁵⁰ M. Karakhanyan, *On β -uniform algebras $H_\beta^\infty(\Delta)$*

SECTION B – Chairman: S. Matveev

16⁴⁰-16⁵⁵ S. Dalalyan, *On hypergroups over the group and extensions of a group*

16⁵⁵-17¹⁰ A. Duzh and D. Lytkina, *Periodic groups saturated by direct products of Suzuki groups and elementary Abelian 2-groups*

17²⁰-17³⁵ H. Melikyan, *Simple Modular Lie Algebras*

17³⁵-17⁵⁰ P. Zolfaghari, *On the Group $(C_3 \times C_3) \rtimes C_2$*

SECTION C – Chairman: V. Ohanyan

16⁴⁰-16⁵⁵ G. Shevchenko, *Limit theorems for mixed stochastic differential equations*

16⁵⁵-17¹⁰ A. Dalalyan, *Oracle Inequalities for Aggregation of Affine Estimators*

17²⁰-17³⁵ W. Gille, *Set Covariance and Small-Angle Scattering Intensity of an Isotropic Set*

17³⁵-17⁵⁰ R. Chitchyan, *On the asymptotic behavior of distribution of random sequences with random indices and regularly varying "tails"*

18⁰⁰-18¹⁵ Z. Bezhaeva and V. Oseledets, *The entropy of hidden Markov measure of Blackwell's type*

18⁵⁰-19⁰⁰ *Conference Group Photo*

19⁰⁰-23⁰⁰ *Banquet*

28 August

9⁰⁰-10⁰⁰ *Breakfast*

10⁰⁰-18⁰⁰ *Excursion*

19⁰⁰-20⁰⁰ *Dinner*

29 August

9⁰⁰-10⁰⁰ *Breakfast*

PLENARY LECTURES – Chairman: S. Konyagin

10⁰⁰-10⁴⁰ A. Olevskii, *Wiener's Conjecture on Cyclic Vectors*

10⁵⁰-11³⁰ P. Wojtaszczyk, *Performance of greedy algorithm in estimating Kolmogorov diameters*

11³⁰-12⁰⁰ *Coffee Break*

SECTION A – Chairman: M. Jiang

12⁰⁰-12¹⁵ A. Vagharshakyan, *Lower Bounds for L_1 Discrepancy*

12¹⁵-12³⁰ Y. Christodoulides, *Averaging of spectral measures associated with the Weyl-Titchmarsh m -function*

12³⁰-12⁴⁵ R. Lechner, *An Interpolatory Estimate for the UMD-Valued Directional Haar Projection*

SECTION B – Chairman: G. Polotovskii

12⁰⁰-12¹⁵ V. Grines, *On interrelation between topological and dynamical properties of diffeomorphisms on 3-manifolds*

12¹⁵-12³⁰ A. Hlavac and M. Marvan, *On surfaces of constant astigmatism*

12³⁰-12⁴⁵ K. Ersoy, *Groups with certain conditions on fixed points of automorphisms*

SECTION C – Chairman: L. Takhtajan

12⁰⁰-12¹⁵ P. Bibikov, *On differential invariants and contact equivalence of ordinary differential equations*

12¹⁵-12³⁰ A. Kamalyan and I. Spitkovsky, *On partial indices of triangular matrix functions R.*

12³⁰-12⁴⁵ R. Teymurazyan, *A Steady Glacier Flow as an Obstacle Problem*

13⁰⁰-14⁰⁰ *Lunch*

PLENARY LECTURES – Chairman: H. Hedenmalm

15⁰⁰-15⁴⁰ R. Krikorian, *Kicked quasi-periodic Schrodinger cocycles and operators*

15⁵⁰-16³⁰ L. Takhtajan, *On functional-difference operators related to the modular double*

SECTION A – Chairman: M. Tropicovsky

16⁴⁰-16⁵⁵ M. Deikalova, *Nikol'skii inequality for algebraic polynomials on a sphere and an interval*

16⁵⁵-17¹⁰ L. Gevorgyan, *On self-commutators of some operators*

17²⁰-17³⁵ M. Jiang, *Phase Unwrapping Problem*

17³⁵-17⁵⁰ S. Chobanyan and V. Tarieladze, *Signs and Permutations: Two Problems of the Function Theory*

SECTION B – Chairman: V. Zvonilov

- 16⁴⁰-16⁵⁵ V. Mirzoyan, *Example of Semi-Einstein Submanifolds, Different From The Cone Over Sphere*
16⁵⁵-17¹⁰ H. Ohnikyan, *On infinite dimensional quadratic forms admitting composition*
17²⁰-17³⁵ R. Mkrtychyan, *Universalization: Diophantine classification of simple Lie algebras and universal nvariant volume of simple Lie groups*
17³⁵-17⁵⁰ L. Abrahamyan, *On isotopic semirings*
18⁰⁰-18¹⁵ R. Hafezi, *Gorenstein projective, injective and flat sheaves over posets*

SECTION C – Chairman: B. Gurevich

- 16⁴⁰-16⁵⁵ K. Gasparian, *Asymptotic Normality of the Logarithm of Partial Likelihood Process in Irregular Case*
16⁵⁵-17¹⁰ K. Mazurkiewicz, M. Sowinski, A. Marlewski, *Iterative searching for the Poisson inter-arrival times of precipitations in Poznan area*
17²⁰-17³⁵ M. Lipatov, *Classification of linear cocycles: barycenter method*
17³⁵-17⁵⁰ D. Farbod, *Asymptotic Properties of the Maximum Likelihood Estimators for some Generalized Pareto-like Frequency Distribution*
18⁰⁰-18¹⁵ M. Basirat, *Inference for Stress-Strength Parameter of Levy Distribution based on Type-II Progressive Censoring*

19⁰⁰-20⁰⁰ *Dinner*

30 August

9⁰⁰-10⁰⁰ *Breakfast*

PLENARY LECTURES – Chairman: R. Krikorian

10⁰⁰-10⁴⁰ D. Bilyk, *Discrepancy theory and analysis*

10⁵⁰-11³⁰ I. Ibragimov and D. Zaporozhets, *Asymptotic behaviour of zeros of random polynomials and analytic functions*

11³⁰-12⁰⁰ *Coffee Break*

SECTION A – Chairman: M. Grigoryan

12⁰⁰-12¹⁵ I. Vigovskaya, Yu. Zelinsky and H. Mkrtchyan, *Generalized convex sets in the hypercomplex space*

12¹⁵-12³⁰ K. Sahakyan, *Hermite type quadrature and cubature formulas*

12³⁰-12⁴⁵ A. Mkrtchyan, *Analytically Nonextendable Multidimensional Power Series*

SECTION B – Chairman: Yu. Movsisyan

12⁰⁰-12¹⁵ S. Davidov, *On regular medial division n -ary groupoids*

12¹⁵-12³⁰ K. Kuyumzhiyan, *Normality of maximal torus orbits closures in simple modules of algebraic groups*

12³⁰-12⁴⁵ E. Kochubinska, *On combinatorics of wreath product of finite symmetric inverse semigroups*

SECTION C – Chairman: R. Saks

12⁰⁰-12¹⁵ H. Ghazaryan, *The Density of the Smooth Compactly Supported Functions in a Weighted Multi-anisotropic Sobolev Space*

12¹⁵-12³⁰ A. Petrosyan and G. Hakobyan, *Variational inequalities for a class of nonlinear pseudoparabolic operators*

12³⁰-12⁴⁵ A. Arakelyan, *Numerical approximation for a variational problem of the spatial segregation of Reaction-Diffusion system*

13⁰⁰-14⁰⁰ *Lunch*

SECTION A – Chairman: A. Sahakian

15⁰⁰-15¹⁵ G. Gevorkyan, *General Franklin systems as bases in B^1*

15¹⁵-15³⁰ G. Gevorkyan and K. Keryan, *On general Franklin systems on R^1*

15⁴⁰-15⁵⁵ A. Martirosyan, *Equivalence of the absolute and unconditional convergences for wavelet systems*

15⁵⁵-16¹⁰ R. Khachatryan, *On directionally differentiable selections of set-valued mappings*

16²⁰-16³⁵ L. Poghosyan and A. Poghosyan, *Convergence acceleration of the quasi-periodic interpolation by rational and polynomial corrections*

SECTION B – Chairman: D. Bilyk

- 15⁰⁰-15¹⁵ T. Harutyunyan, *The inverse problem for a family of Sturm-Liouville operators*
- 15¹⁵-15³⁰ V. Dumanyan, *On solvability of Dirichlet problem for general second order elliptic equation*
- 15⁴⁰-15⁵⁵ Ya. Dymarskii and Yu. Evtushenko, *On manifolds of periodic eigenvalue problems with selected double eigenvalue*
- 15⁵⁵-16¹⁰ G. Karapetyan and N. Saribekyan, *Spectral stability of higher order semi-elliptic operators.*
- 16²⁰-16³⁵ A. Babayan, *On a Dirichlet Problem for the Fourth Order Partial Differential Equation when Characteristic Equation has only Double Roots*
- 16³⁵-16⁵⁰ H. Hayrapetyan and V. Babayan, *On the Riemann Boundary Value Problem in the Space of continuous functions*
- 17⁰⁰-17¹⁵ T. Harutyunyan and Yu. Ashrafyan, *On the “movement” of the zeros of eigenfunctions of the Sturm-Liouville problem*
- 17¹⁵-17³⁰ A. Pahlevanyan, *The isospectral Sturm-Liouville problems*
- 18⁵⁰-19⁰⁰ *Closing ceremony*
- 19⁰⁰-20⁰⁰ *Dinner*

31 August

- 9⁰⁰-10⁰⁰ *Breakfast*
- 10⁰⁰ *Departure*