

International Conference

Dedicated to 90th Anniversary of

Sergey Mergelyan

20 – 25 May, Yerevan

National Academy of Sciences, Armenia

Program

20 May 2018 - Arrival Day

21 May 2018

Morning Session: Opening, NAS Main Building

- 09:00 – 10:00 **Registration**
- 10:00 – 11:30 **Jubilee Official Ceremony**
- 11:30 – 12:00 **Movie Screening about Mergelyan**
- 12:00 – 14:00 **Welcome Reception**

Afternoon Session: Plenary Talks, Institute of Mechanics

Session Chair: **Kislyakov S.**

- 15:00 – 15:40 **M. Sodin**, Spectral measures of finitely valued stationary sequences and all that jazz
- 15:45 – 16:25 **S. Agaian**, Artificial and Biological Vision Synergistic Approach: Applications, Challenges and Perspectives

Section A: Institute of Mathematics

Session Chair: **Meladze H.**

- 16:35 – 16:55 **Yengibaryan N.**, Method of semi-inverse factorization
- 17:00 – 17:20 **Babayan A.**, On a Dirichlet Problem for Sixth Order Improperly Elliptic Equation

Section B: Institute of Mechanics

Session Chair: **Andrievskii V.**

- 16:35 – 16:55 **Kruzhilin N.**, Proper holomorphic maps of Reinhardt domains
- 17:00 – 17:20 **Komlov A.**, Reconstruction of the values of meromorphic functions on a compact Riemann surface via Hermite-Pade polynomials
- 17:25 – 17:45 **Hovakimyan N.**, Cooperative Control of UAVs
- 19:00 **Gala Dinner**

22 May 2018

Morning Session: Plenary Talks, Institute of Mechanics

Session Chair: Sodin M.

- 09:30 - 10:10 **Sergeev A.**, Universal Teichmueller space: non-trivial example of infinite-dimensional complex manifolds
- 10:15 - 10:55 **Kislyakov S.**, Boundary smoothness drop for an analytic function compared to the smoothness of its modulus. A survey
- 11:00 - 11:40 **Coffee Break, NAS Cafeteria**

Afternoon Sessions:

Section A: Institute of Mathematics

Session Chair: Poltoratski A.

- 11:40 – 12:00 **Gevorkyan G.**, On uniqueness of Franklin series
- 12:05 - 12:25 **Keryan K., Passenbrunner M.**, Unconditionality of periodic orthonormal spline systems in L^p
- 12:30 - 12:50 **Karagulyan G.**, On exceptional sets of Hilbert transform
- 12:55 - 13:15 **Arakelyan A., Barkhudaryan R.**, On a general class of the finite difference schemes arising in Reaction-diffusion systems
- 13:20 - 13:40 **Nurbekyan L.**, Fourier approach to mean-field game systems

Section B: Institute of Mechanics

Session Chair: Yattselev M.

- 11:40 – 12:00 **Avetisyan K., Gurlebeck K.**, On some Hardy-Littlewood type inequalities for weighted spaces in reduced quaternions

12:05 - 12:25	Bogatyrev A. , Uniform rational approximation and optimal design of electrical filters
12:30 - 12:50	Fedorovskiy K. , Nevanlinna domains with large boundaries
12:55 - 13:15	Danielyan A. , Mergelyan's polynomial approximation theorem and related questions
13:20 - 13:40	Nestoridis V. , Universal Taylor Series without Baire's method and two theorems of Mergelyan
13:40 - 15:00	Lunch, NAS Cafeteria

Plenary Talk: Institute of Mechanics

Session Chair: **Danielyan A.**

15:00 - 15:40	Andrievskii V. , Polynomial Approximation and Polynomial Inequalities in the Complex Plane
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Section A: Institute of Mathematics

Session Chair: **Nestoridis V.**

15:45 - 16:05	Shahverdian A. , Limiting Theorems for Higher-Order Differences of Random Independent Events
16:10 - 16:30	Mnatsakanyan G. , Estimates for Strong-Sparse Operators
16:35 - 16:55	Banerjee A. , On the uniqueness of meromorphic functions and its derivatives sharing one set
17:00 - 17:20	Srapionyan N. , On the quasi-greedy constant of the Haar subsystems in $L^1(0,1)$

Section B: Institute of Mechanics

Session Chair: **Fedorovskiy K.**

- 15:45 - 16:05 **Mkrtchyan S.**, Rigidity, Graphs and Hausdorff Dimension
- 16:10 - 16:30 **Hakobyan H.**, A Menger curve with the co-Hopfian property
- 16:35 - 16:55 **Mikayelyan G.**, **Mikayelyan V.**, A generalized characteristic for functions meromorphic in the half plane
- 17:00 – 17:20 **Pogossian E.**, Constructive Cognitive Models for Competition, Defense and Dialog Problems

23 May 2018

Morning Session: Plenary Talks, Institute of Mechanics

Session Chair: **Agaian S.**

- 09:30 - 10:10 **Shahgholian H.**, Free boundaries on Lattice, and their scaling limits
- 10:15 - 10:55 **Yattselev M.**, Distribution of poles of optimal rational functions
- 11:00 - 11:40 **Coffee Break, NAS Cafeteria**

Session Chair: **Sergeev A.**

- 11:40 - 12:20 **Meladze H.**, **Prangishvili A.**, **Davitashvili T.**, Nonlocal Contact Problems for Solution of Some Linear Equation of Mathematical Physics

12:30 - Sightseeing Tour

24 May 2018

Morning Session: Plenary Talks, Institute of Mechanics

Session Chair: Shahgholian H.

- 09:30 - 10:10 Poltoratski A., Fourier frames and spectral problems
- 10:15 - 10:55 Ivanisvili P., Markov--Bernstein type estimates on the Hamming cube
- 11:00 - 11:40 Coffee Break, NAS Cafeteria

Afternoon Sessions:

Section A: Institute of Mathematics

Session Chair: Ivanisvili P.

- 11:40 – 12:00 Hakopian H., Vardanyan V., On a property of GC_n sets
- 12:05 - 12:25 Gevorgyan L., On the area of the numerical range
- 12:30 - 12:50 Harutyunyan T., The direct and inverse Sturm-Liouville problems
- 12:55 - 13:15 Karapetyan A., Growth Estimates for Weighted Classes of Holomorphic Functions in the Matrix Disc
- 13:20 - 13:40 Ansari M., Strongly Hypercyclic Operators

Section B: Institute of Mechanics

Session Chair: Bogatyrev A.

- 11:40 – 12:00 Ohanyan V., Covariogram of convex bodies and geometric probabilities
- 12:05 - 12:25 Sukiasyan H., On extremal property of Delaunay triangulation
- 12:30 - 12:50 Aharonyan N., Generalized Pleijel Identity and Covariograms of Convex Bodies

- 12:55 - 13:15 **Gevorkyan A.**, Quantum Vacuum-Quintessence as the Natural Quantum Computer
- 13:20 - 13:40 **Darbinyan S.**, A theorem on even pancyclic bipartite digraphs
- 13:40 - 15:00 **Lunch, NAS Cafeteria**

Plenary Talk: Institute of Mechanics

Session Chair: **Kruzhilin N.**

- 15:00 - 15:40 **Manolaki M.**, From Mergelyan's theorem to universal approximation

Section A: Institute of Mathematics

Session Chair: **Ohanyan V.**

- 15:45 - 16:05 **Haroutunian M., Haroutunian E.**, Up to Date Directions of Information Theory Research in Armenia
- 16:10 - 16:30 **Aleksanyan S.**, Optimal uniform approximation on the angle by the harmonic functions

Section B: Institute of Mechanics

Session Chair: **Gevorkyan A.**

- 15:45 - 16:05 **Barseghyan A.**, On inversion of Toeplitz matrices with elements from a ring
- 16:10 - 16:30 **Poghosyan A.**, Image Caption Generation based on Object Detector

25 May 2018 – Departure Day