

International Conference  
Harmonic Analysis and Approximations, V

10 - 17 September, 2011, Tsaghkadzor, Armenia

*Dedicated to 75th anniversary of academician Norair Arakelian*

**P R O G R A M M E**

10 SEPTEMBER

- 10<sup>00</sup>-19<sup>00</sup> Arrival and Registration  
19<sup>00</sup>-21<sup>00</sup> *Opening Ceremony and Welcome Reception*

11 SEPTEMBER

- 9<sup>00</sup>-10<sup>00</sup> *Breakfast*

**PLENARY LECTURES** - Chairman: *P. Gauthier*

- 10<sup>00</sup>-10<sup>50</sup> N. Arakelian, *Analytic and real analytic continuation*  
11<sup>00</sup>-11<sup>50</sup> D. Drasin, *Frequently hypercyclic entire functions*  
11<sup>50</sup>-12<sup>10</sup> *Coffee Break*  
12<sup>10</sup>-13<sup>00</sup> J. Müller, *Continuous functions with universal Fourier series*  
13<sup>00</sup>-14<sup>00</sup> *Lunch*

**SECTION A** – Chairman: *U. Goginava*

- 15<sup>00</sup>-15<sup>20</sup> R. Hovsepyan, *On one class of trigonometric series*  
15<sup>25</sup>-15<sup>45</sup> E. Lebedeva, *Periodic wavelets with good angular-frequency localization*  
15<sup>55</sup>-16<sup>15</sup> M. Grigoryan, *On the coefficients of expansion of continuous function by the Faber-Schauder system*  
16<sup>20</sup>-16<sup>40</sup> G. Karagulyan, *On the divergence sets of some sequences of operators*  
16<sup>50</sup>-17<sup>10</sup> M. Nalbandyan, *On one representation spectrum*

**SECTION B** – Chairman: *N. Nikolski*

- 15<sup>00</sup>-15<sup>20</sup> H. Malonek, *On special functions in hypercomplex function theory and their applications*  
15<sup>25</sup>-15<sup>45</sup> A. Karapetyan, *Weighted integral representations of holomorphic functions in tube domains over real balls*  
15<sup>55</sup>-16<sup>15</sup> A. Cação, *Multidimensional Appell sequences via hypercomplex function theory*

- 16<sup>20</sup>-16<sup>40</sup> K. Avetisyan and Y. Tonoyan, *Some extensions of the Hardy-Littlewood inequalities for harmonic functions*
- 16<sup>50</sup>-17<sup>10</sup> S. Aleksanyan, *Optimal uniform and tangential approximation on the sector by the entire functions*

#### **SECTION C – Chairman: V. Nestoridis**

- 15<sup>00</sup>-15<sup>20</sup> W. Luh, *Analytic properties of power series with radius of convergence zero*
- 15<sup>25</sup>-15<sup>45</sup> Th. Neuschel, *Asymptotics for menage polynomials*
- 15<sup>55</sup>-16<sup>15</sup> S. Mironova, B. Katz and A. Pogodina, *Solvability of jump boundary value problem on a countable set of closed curves*
- 16<sup>20</sup>-16<sup>40</sup> J. Koch, *On a conjecture by Louis Brickman concerning complex polynomials*
- 16<sup>50</sup>-17<sup>10</sup> P. Mohanty, *Vector valued bilinear maximal operator*
- 17<sup>15</sup>-17<sup>35</sup> S. Petrosyan, *Discrete Mellin transform*
- 19<sup>00</sup>-20<sup>00</sup> *Dinner*
- 20<sup>00</sup>-20<sup>50</sup> *Concert*

### 12 SEPTEMBER

- 9<sup>00</sup>-10<sup>00</sup> *Breakfast*

#### **PLENARY LECTURES – Chairman: K.I. Oskolkov**

- 10<sup>00</sup>-10<sup>50</sup> V. Temlyakov, *Lebesgue-type inequalities for greedy approximation with respect to bases*
- 11<sup>00</sup>-11<sup>50</sup> P. Wojtaszczyk, *Sparse functions*
- 11<sup>50</sup>-12<sup>10</sup> *Coffee Break*
- 12<sup>10</sup>-13<sup>00</sup> W. Sickel, *Best  $m$ -term approximation and tensor products of Sobolev and Besov spaces*
- 13<sup>00</sup>-14<sup>00</sup> *Lunch*

#### **SECTION A – Chairman: G. Gevorkyan**

- 15<sup>00</sup>-15<sup>20</sup> U. Goginava, *Almost everywhere summability of Walsh-Fourier series*
- 15<sup>25</sup>-15<sup>45</sup> A. Sahakian and U. Goginava, *Partial generalized variation and multivariate Fourier series*
- 15<sup>55</sup>-16<sup>15</sup> S. Sargsyan and M. Grigoryan, *Some properties of Vilenkin system*
- 16<sup>20</sup>-16<sup>40</sup> S. Gogyan, *On some open problems in Greedy Approximation*
- 16<sup>50</sup>-17<sup>10</sup> S. Episkoposyan, *On the series with monotonic coefficients by generalized Walsh system*
- 17<sup>15</sup>-17<sup>35</sup> H. Aleksanyan, *Weighted greedy algorithm in  $L_p(0;1)$  and  $C(0;1)$  with respect to Franklin and Trigonometric Systems*

**SECTION B** – Chairman: *W. Luh*

- 15<sup>00</sup>-15<sup>20</sup> Yu. Farkov, *On the  $n$ -widths for classes of analytic functions*  
15<sup>25</sup>-15<sup>45</sup> V. Nestoridis, *Universal Pade approximants and generic approximation of functions by their Pade approximants*  
15<sup>55</sup>-16<sup>15</sup> R. Kovacheva, *Valued distribution of geometrically converging rational functions*  
16<sup>20</sup>-16<sup>40</sup> H.-P. Blatt, *Growth and value distribution of rational approximants*  
16<sup>50</sup>-17<sup>10</sup> M. Lind, *On moduli of  $p$ -continuity*  
17<sup>15</sup>-17<sup>35</sup> R. Khachatryan and R. Avetisyan, *On derivatives of multivalent maps*

**SECTION C** – Chairman: *O. Reynov*

- 15<sup>00</sup>-15<sup>20</sup> Sh. Madan, *Fuglede's spectral set conjecture for two and three intervals*  
15<sup>25</sup>-15<sup>45</sup> P. Shunmugaraj, *Strong proximality of closed convex subsets*  
15<sup>55</sup>-16<sup>15</sup> A. Beknazaryan and A. Petrosyan, *Bounded Projections on  $L_p$  spaces in the unit disk*  
16<sup>20</sup>-16<sup>40</sup> V. Nersesyan, *Ergodicity for the stochastic complex Ginzburg-Landau equation*  
16<sup>50</sup>-17<sup>10</sup> R. Srivastava, *Coxeter system of lines are sets of injectivity for twisted spherical means on  $C$*   
17<sup>15</sup>-17<sup>35</sup> S. Dutta, *Completely bounded  $L^p$  multipliers*  
19<sup>00</sup>-20<sup>00</sup> *Dinner*

13 SEPTEMBER

- 9<sup>00</sup>-10<sup>00</sup> *Breakfast*

**PLENARY LECTURES** – Chairman: *N. Arakelian*

- 10<sup>00</sup>-10<sup>50</sup> P. Gauthier, *Instability of the Riemann hypothesis*  
11<sup>00</sup>-11<sup>50</sup> K.I. Oskolkov, *On Vinogradov series and Riemann-Schrodinger function*  
11<sup>50</sup>-12<sup>10</sup> *Coffee Break*  
12<sup>10</sup>-13<sup>00</sup> W. Plesniak, *Polynomial approximation via subanalytic geometry methods*  
13<sup>00</sup>-14<sup>00</sup> *Lunch*

**SECTION A** – Chairman: *W. Sickel*

- 15<sup>00</sup>-15<sup>20</sup> O. Kuznetsova, *On multiple trigonometric series*  
15<sup>25</sup>-15<sup>45</sup> V. Vasyunin, *Bellman functions for extremal problems on  $BMO$*   
15<sup>55</sup>-16<sup>15</sup> M. Skopina, *Multivariate wavelet frames and frame-like systems*  
16<sup>20</sup>-16<sup>40</sup> A. Kobelyan, *Convergence of greedy approximation a.e. and in  $L^1(0;1)$  with respect to general Haar system*  
16<sup>50</sup>-17<sup>10</sup> D. Karagulyan, *On the unbounded divergence sets of series in Franklin system*  
17<sup>15</sup>-17<sup>35</sup> L. Galoyan, *On the generalized Harmonic-Cesaro summability of Fourier series*

**SECTION B** – Chairman: *A. Shadrin*

- 15<sup>00</sup>-15<sup>20</sup> Hakop Hakopian, *On classification of  $GC_2$  sets in  $R^3$*

- 15<sup>25</sup>-15<sup>45</sup> A. Apozyan, *On an example of  $GC_2$  set without maximal hyperplanes*  
 15<sup>55</sup>-16<sup>15</sup> G. Ktryan, *On the number of maximal planes of  $GC_2$  sets in  $R^3$*   
 16<sup>20</sup>-16<sup>40</sup> L. Rafayelyan, *On extension of Chang-Yao natural lattice*  
 16<sup>50</sup>-17<sup>10</sup> D. Bilyk, *Low-discrepancy and harmonic analysis*  
 17<sup>15</sup>-17<sup>35</sup> R. Barkhudaryan, A. Arakelyan and M. Poghosyan, *Finite difference scheme for the two-phase obstacle problem*

**SECTION C** – Chairman: *H. Malonek*

- 15<sup>00</sup>-15<sup>20</sup> V. Peller, *Operator moduli of continuity*  
 15<sup>25</sup>-15<sup>45</sup> L. Gevorgyan, *On finite dimensional approximations of infinite dimensional operators*  
 15<sup>55</sup>-16<sup>15</sup> L. Mikayelyan, *A generalization of Banach fixed point principle*  
 16<sup>20</sup>-16<sup>40</sup> O. Reynov, *Approximation of operators in dual spaces by adjoints*  
 16<sup>50</sup>-17<sup>10</sup> Hrant Hakobyan, *Modulus estimates in slit domains and applications*  
 17<sup>15</sup>-17<sup>35</sup> H. Mikayelyan, *The zero level set for a certain weak solution, with applications to the Bellman equations*
- 19<sup>00</sup>-23<sup>00</sup> *Banquet*

14 SEPTEMBER

- 9<sup>00</sup>-10<sup>00</sup> *Breakfast*  
 10<sup>00</sup>-18<sup>00</sup> *Excursion*  
 19<sup>00</sup>-20<sup>00</sup> *Dinner*

15 SEPTEMBER

- 9<sup>00</sup>-10<sup>00</sup> *Breakfast*

**PLENARY LECTURES** – Chairman: *D. Drasin*

- 10<sup>00</sup>-10<sup>50</sup> N. Nikolski, *Approximation problems related to the Riemann hypothesis*  
 11<sup>00</sup>-11<sup>50</sup> V. Totik, *Metric and structural properties of harmonic measures*  
 11<sup>50</sup>-12<sup>10</sup> *Coffee Break*  
 12<sup>10</sup>-13<sup>00</sup> A. Shadrin, *Orthogonal spline-projector and related questions*
- 13<sup>00</sup>-14<sup>00</sup> *Lunch*

**SECTION A** – Chairman: *M. Grigoryan*

- 15<sup>00</sup>-15<sup>20</sup> H.K. Nigam, *On approximation of functions by product means*  
 15<sup>25</sup>-15<sup>45</sup> G. Oniani, *Maximal operators in variable Lebesgue spaces*  
 15<sup>55</sup>-16<sup>15</sup> A. Sargsyan and T. Grigoryan, *On the absolute convergence of series in the Faber-Schauder system*

- 16<sup>20</sup>-16<sup>40</sup> A. Poghosyan, *Fast convergence of the Fourier-Pade approximation for smooth functions*  
 16<sup>50</sup>-17<sup>10</sup> G. Gevorkyan and A. Martirosyan, *Paley function and A-integrability of series by general Franklin systems*

**SECTION B** – Chairman: S. Mayboroda

- 15<sup>00</sup>-15<sup>20</sup> T. Harutyunyan and A. Pahlevanyan, *On the solution of an inverse Sturm-Liouville problem*  
 15<sup>25</sup>-15<sup>45</sup> H. Hayrapetyan and A. Hayrapetyan, *Boundary value problems for polyanalytic functions over the half-space in weighed spaces*  
 15<sup>55</sup>-16<sup>15</sup> A. Babayan, *On the defect numbers of the boundary value problem for the properly elliptic equation*  
 16<sup>20</sup>-16<sup>40</sup> A. Vagharshakyan, *On Riemann's mapping theorem*  
 16<sup>50</sup>-17<sup>10</sup> R. Aramyan, *An inversion of generalized cosine transform in Hilbert's fourth problem*  
 17<sup>15</sup>-17<sup>35</sup> Anush Petrosyan, *Fourier expansion of differential operator by means of eigenfunctions: special case*  
 19<sup>00</sup>-20<sup>00</sup> *Dinner*

16 SEPTEMBER

- 9<sup>00</sup>-10<sup>00</sup> *Breakfast*

**PLENARY LECTURES** – Chairman: V. Temlyakov

- 10<sup>00</sup>-10<sup>50</sup> A. Talalyan, *Differentiation by random dyadic nets and uniqueness of multiple trigonometric series*  
 11<sup>00</sup>-11<sup>50</sup> S. Mayboroda, *Harmonic analysis and potential theory for higher order elliptic boundary problems*  
 11<sup>50</sup>-12<sup>10</sup> *Coffee Break*  
 13<sup>00</sup>-14<sup>00</sup> *Lunch*  
 15<sup>00</sup>-17<sup>00</sup> *Local Excursion*  
 18<sup>45</sup>-19<sup>00</sup> *Closing Ceremony*  
 19<sup>00</sup>-20<sup>00</sup> *Dinner*

17 SEPTEMBER

- 9<sup>00</sup>-10<sup>00</sup> *Breakfast*  
 10<sup>00</sup> *Departure*