19th Summer St. Petersburg Meeting in Mathematical Analysis

MONDAY, July 5

9:30–10:30 REGISTRATION

10:30 OPENING

10:40–11:25 **M. Anderson** (University College London). *First order univalence criteria.*

Coffee break

11:55–12:40 **V. Eiderman** (University of Kentucky). *Capacities generated by vector-valued Riesz potentials.*

Lunch

15:00–15:20 **S. Favorov** (Kharkov National University). *Discrete unbounded sets in a finite dimensional space.*

15:25–15:45 **K. Dyakonov** (ICREA and Universitat de Barcelona). *Local ABC theorems for analytic functions.*

Coffee break

16:15–16:35 **V. Vlasov** (Moscow State University). *Spectral analysis of abstract integro-differential equations in a Hilbert space.*

16:40–17:00 **S. Avdonin** (University of Alaska). *Riesz bases of functions related to the heat equation with memory.*

17:05–17:25 **I. Nikolenko** (Karazin Kharkiv National University). *On strong asymptotic tracts of functions holomorphic in the disk.*

TUESDAY, July 6

10:00–10:45 **V. Napalkov** (Institute of Mathematics of RAS, Ufa). *On the Vallee-Poussin problem for convolution equations.*

Coffee break

11:05–11:50 **E. Malinnikova** (Norwegian University of Science and Technology). *Radial oscillation of harmonic functions in the Korenblum class.*

11:55–12:40 **Yu. Lyubarski** (Norwegian University of Science and Technology). *Direct and inverse problem of multichannel scatering.*

Lunch

15:00–15:20 **A. Pushnitski** (King's College London). *Spectral asymptotics of Bargmann-Toeplitz operators with compactly supported symbols.*

15:25–15:45 **G. Roos** (Université Poitiers). *Bohr's theorem on complex bounded symmetric domains.*

Coffee break

16:15–16:35 **M. Roginskaya** (Chalmer University of Technology, Gothenborg). *Partial information about Fourier coefficients of finite measures.*

16:40–17:00 **G. Amosov** (Moscow Institute of Physics and Technology). *On equations of symplectic quantum tomography.*

17:05–17:25 **L. Maergoiz** (Federal University, Academgorodok, Krasnoyarsk). *Multiple Laurent series with support in a strictly convex cone.*

20:00 CONCERT

Laureats of International Competitions **Alex Kruglov** (saxophone), **Angelica Komissarenko** (piano)

Leonardo da Vinci, Sonata for saxophone and piano; *Eugene Bozza*, Aria for saxophone and piano; *Pedro Iturralde*, Greek suite for saxophone and piano; *Rodion Shchedrin*, "Imitating Albeniz" for saxophone and piano; *Alexander Tcherepnin*, Sonatine Sportive for saxophone and piano; *Igor Stravinsky*, Waltz and Allegro for saxophone and piano; *Angelica Komissarenko*, "Oda to the Defenders of Patria" for saxophone and piano; *Angelica Komissarenko*, Three little pieces for piano; *Angelica Komissarenko*, Piano cycle ("Deserted Beach", "Journey", "Farewell Caprice", "Playing on Shore"); *Angelica Komissarenko*, Variations for piano.

0:00 BOAT TRIP

WEDNESDAY, July 7

FREE DAY

THURSDAY, July 8

10:00–10:45 **C. Perez** (Universidad de Sevilla). *A tribute to the extrapolation theorem: sharp weighted operator bounds for singular integrals and commutators.*

Coffee break

11:05–11:50 **A. Volberg** (Michigan State University, East Lansing). *Corona decomposition of A_2 weights.*

11:55–12:40 **L. Slavin** (University of Cincinnati). *The embedding $BMO \subset L^p_{loc}$ and sharp equivalence of BMO norms.*

Lunch

15:00–15:20 **A. Reznikov** (Steklov Mathematical Institute at St.Petersburg). *On the weak-type estimates for non-negative weights: Bellman function approach.*

15:25–15:45 **R. Romanov** (St.Petersburg State University). *Large time asymptotics for linear Boltzmann equation and structure of its spectral singularities.*

Coffee break

16:15–16:35 **R. Bessonov** (Steklov Mathematical Institute at St.Petersburg). *Bounded symbols of truncated Toeplitz operators.*

16:40–17:00 **I. Jabbarov** (Ganja State University). *On an algebraic application of the theorem on implicit functions.*

17:05–17:25 **S. Ivanov** (St.Petersburg State University). *Spectrum and controllability of Gurtin–Pipkin type equations.*

FRIDAY, July 9

10:00–10:45 **A. Montes-Rodriguez** (University of Seville). *Extinction sets for the Klein–Gordon equation.*

Coffee break

11:05–11:50 **V. Peller** (Michigan State University, East Lansing). *Perturbations of normal operators.*

11:55–12:40 **B. Pavlov** (St.Petersburg State University). *Chain rule for scattering matrices and analytic perturbation procedure based on elimination of dangerous resonances.*

Lunch

15:00–15:20 **I. Musin** (Institute of Mathematics, Ufa). *Weighted spaces of infinitely differentiable and entire functions.*

15:25–15:45 **M. Karmanova** (Sobolev Institute of Mathematics, Novosibirsk). *A new approach to the study of Carnot–Caratheodory geometry.*

Coffee break

16:15–16:35 **N. Valeev** (Institute of Mathematics, Ufa). *Multiparameter inverse spectral problems and their applications.*

16:40–17:00 **M. Mazalov** (Military Academy of Anti-aircraft defence, Smolensk). *Some new uniform approximation theorems for solutions of elliptic equations.*

17:05–17:25 **O. Reinov** (St.Petersburg State University *and* Abdus Salam School of Mathematical Sciences, Pakistan). *On representation systems for the space* $L_1[0,1]$.

17:30 POSTER SESSION

A. Dilmukhametova (Bashkir State University, Ufa). *The fundamental principle of Euler for a class of equations with polynomial coefficients.*

A. Mullabaeva (Baskir State University, Ufa). *Generalized Fock space and its applications.*

A. Rumyantseva (Baskir State University, Ufa). *Asymptotic behavior of subharmonic functions on the plane.*

T. Stulova (N.Ye. Zukovskij National AeroSpace University, Kharkov). *On well-posedness of a non-resonance operator differential equation in a space of entire functions of exponential type.*

A. Uglanov (St.Petersburg State Polytechnical University). *Parametric vector integrals.*

N. Yusupova (Baskir State University, Ufa). *Growth evaluation of certain Dirichlet series on the positive axis.*

18:30 CONFERENCE PARTY

SATURDAY, July 10

10:00–10:45 **R. Yulmukhametov** (Institute of Mathematics, Ufa). *The exactness of the asymptotic approximation of subharmonic functions by using the logarithm of the absolute value of an entire function.*

10:50–11:35 **B. Khabibullin** (Bashkir State University, Ufa). *Zero sequences of holomorphic functions, harmonic measures, and Green's functions.*

Coffee break

11:55–12:40 **Yu. Belov** (Norwegian University of Science and Technology). *Non-completeness of biorthogonal system.*

12:45–13:30 **A. Poltoratski** (Texas A&M University). *Completeness of exponentials in L^2-spaces.*