June 17

17.30-19.00 **Registration**

June 18

9.30-11.00 **Registration**
11.00-11.30 **Coffee Break**

11.30-12.00 **Opening Ceremony**

Plenary Lecture   Chairman **Maria Skopina**

12.00-13.00 **Marcin Bownik** (co-authored with J. Lemvig), "Wavelets for non-expanding dilations and the lattice counting estimate"

13.00 – 15.00 Lunch

Section A: Multiresolution and wavelet methods   Chairman **Eugene Postnikov**

15.00-15.40 **B. Somanathan**, "HAAR 2D wavelet for endometrial cancer using MRI images"
15.40-15.55 **Coffee Break**
15.55-16.35 **Pammy Manchanda,** "Nonuniform multiresolution analysis and vector valued wavelets"
16.40-17.00 **Madan Dixit** (co-authored with A. Pathak, P. Yadav), "Convolution for continuous quaternion wavelet transform"
17.05-17.25 **Ashish Pathak**, "Asymptotic approximation of Continuous Wavelet Transform"
17.30-17.50 **Juan Miguel Medina** (co-authored with Bruno Cernuschi-Frias), "Some results on the support of the Continuous Wavelet Transform"

Section B: Signal Analysis and Processing Chairman **Lev Novikov**

15.00-15.40 **Abul Hasan Siddiqi**, "Application of wavelets and their variants to tomography"
15.40-15.55 **Coffee Break**
15.55-16.15 **Valeriy Zheludev** (co-authored with A. Averbuch and P. Neittaanmäki), "Periodic spline-based frames"
16.20-16.40 **Oleg Kosogorov** (co-authored with A. A. Makarov), "On the application of hierarchical systems of B-splines to compression of radar data"
16.45-17.05 **Anatoliy Gurjanov**, "Recognition of useful multiple frequency signal received with prevailing additive noise by means of Sampling Fast Fourier Transform"
17.10-17.30 **Alexander Guryanov**, TBA
17.35-17.55 **Oleksandr Fomin** (co-authored with Vitaliy Pavlenko), "Volterra kernels wavelet-transformation for features space dimension reduction in nonlinear diagnostic systems"

Section C: Harmonic Analysis   Chairman **Martin Grigoryan**

15.00-15.40 **Valentin Skvortsov**, "Generalized integrals for Banach space valued and Riesz space valued functions and some application in harmonic analysis"
15.40-15.55 **Coffee Break**
15.55-16.35 **Boris Golubov** (co-authored with S.S.Volosivets), "Multiplicative Fourier transforms belonging to Besov-Lipschitz or Herz spaces"
16.40-17.00 **Andi Kivinukk**, "On approximation processes defined by a cosine operator function"
17.05-17.25 **Giancarlo Travaglini** (co-authored with L. Brandolini, L. Colzani, G. Gigante and M.R. Tupputi), "L^p estimates for the number of lattice points in a convex body"

18.15 Welcome Party

June 19

Plenary Lecture   Chairman **Valeriy Zheludev**

10.00-11.00 **Amir Averbuch** (co-authored with P. Neittaanmäki and V. Zheludev),
"Application of spline-based frames for image restoration"

11.00-11.30 **Coffee Break**

Section A: Greedy Algorithms   Chairman **Artur Sahakian**

11.30-12.10 **Alexander Petukhov** (co-authored with I. Kozlov),
"Greedy algorithm for subspace clustering from corrupted and incomplete data"
12.15-12.55 **Martin Grigoryan**, "Greedy algorithm and modifications of functions"

13.00 – 15.00 Lunch

Section A: Wavelet Methods   Chairman **Abul Hasan Siddiqi**

15.00-15.40 **Eugene Postnikov** (co-authored with E.A. Lebedeva and A.I. Lavrova),
"Computational realization of CWT inversion without the admissibility condition and its
applications"
15.45-16.25 **Maria Perel** (co-authored with E.Gorodnitskiy, Yu Geng, Ru-Shan Wu), "Gaussian
packets summation in the inhomogeneous medium based on Poincaré wavelets and its
application to seismics"
Coffee Break
17.00-17.20 **Nagma Irfan** (co-authored with A.H. Siddiqi), "Application of wavelets in numerical
evaluation of Hankel transforms arising in astronomy"
17.25-17.45 **Mahdieh Tahami** (co-authored with A. Askari Hemmat and S.A. Yousefi),
"Numerical solution of two-dimensional first kind Fredholm integral equations by using Legender
wavelet of degree 2"
17.50-18.10 **Vadoud Najjari**, "Hyperbolic Archimedean copulas by wavelets"
18.15-18.35 **Mohammad Shahriari** (co-authored with Behzad Nemati Saray),
"Mixed finite difference and multiwavelet Galerkin methods for Benjamin-Bona-Mahony"

Section C: Approximation Theory   Chairman **Boris Golubov**

15.00-15.40 **Vladimir Zhuk**, "On the Jackson type inequalities for best approximations of
periodic functions"
15.45-16.05 **Pavel Andrianov** (co-authored with Maria Skopina), "On Jackson-type inequality
for multivariate Haar polynomials"
16.10-16.30 **Lev Ikhsanov**, "Estimate of a function orthogonal to constant piecewise ones by
the second modulus of continuity"
Coffee Break
17.00-17.20 **Aleksandr Krivoshein** (co-authored with Maria Skopina), "On Kotelnikov-type
approximation theorems"
17.25-17.45 **Gert Tamberg**, "On approximation properties of generalized sampling operators"
17.50-18.10 **Olga Orlova** (co-authored with Gert Tamberg), "On approximation properties of
generalized Kantorovich-type sampling operators"

June 20

Section A: Wavelet Frames   Chairman **Shiv Kaushik**

10.20-11.00 **Martin Ehler**, "On the multiresolution structure of wavelet frames"
Coffee Break
11.30-12.10 **Elena Lebedeva**, "A refinement of periodic uncertainty principle"

13.00 – 15.00 Lunch

15.00-15.40 **Andreas Heinecke** (co-authored with Z. Fan and Z. Shen), "Duality for frames and multivariate wavelet frame construction"
Coffee Break
16.10-16.30 **Xiaosheng Zhuang** (co-authored with B. Han, Q.T. Jiang, and Z. Shen), "Canonical quincunx tight framelets"
16.35-16.55 **Asghar Rahimi** (co-authored with G. Zandi and B. Daraby), "The redundancy notion of fusion frames in Hilbert spaces"
17.00-17.20 **Mahdieh Fatemidokht** (co-authored with A. Askari Hemmat), "Dual shearlet frame on $L^2(Q_p^2)$"

Section B: Signal Analysis and Processing   Chairman **Pammy Manchanda**

15.00-15.40 **Ilya Krishtal** (co-authored with A. Aldroubi), "Spectral identification in dynamical sampling"
Coffee Break
16.10-16.50 **Yuri Demjanovich**, "A new approach to spline-wavelet decompositions of discrete flows"

Section C: Splines   Chairman **Yuri Volkov**

15.00-15.40 **Alexander Rozhenko**, "Radial basis functions in multivariate approximation"
 Coffee Break
16.10-16.30 **Anna Gladkaya** (co-authored with O.L. Vinogradov), "The analogue of the Akhiezer-Krein-Favard operators for non-periodic splines"
16.35-16.55 **Stanislav Primakov**, "On quintic spline construction's algorithms"
17.00-17.20 **Anastasia Ulitskaya**, "On the preservation of the logarithmic convexity by positive operators"

Poster Section
12.15-13.00
Irina Burova (co-authored with A. Doronina), "Properties of the integro-differential splines of fifth order"
Anna Saksa (co-authored with Andi Kivinukk), "Approximation by Rogosinski-type processes and the cosine operator functions"
Boris Shumilov (co-authored with Zh. Abdykalyk kyzy), "Displaced multiwavelets and splitting algorithms"
Aleksandr Krivoshein, Symmetric MRA-based wavelet frames"

Alexander Rozhenko (co-authored with P.V. Mokshin and E.A. Fedorov), "On fitting a solution of linear operator equation"

June 21

Plenary Lecture   Chairman **Marcin Bownik**

10.00-11.00 **Vladimir Protasov**, "Regularity of wavelets and subdivisions: a recent progress"
11.00-11.30 **Coffee Break**

Section A: Wavelets on Locally Compact Groups   Chairman **Valentin Skvortsov**

11.30-12.10 **Alexander Barg** (co-authored with Maksim Skriganov), "Association schemes on zero-dimensional groups and wavelet-like functions related to them"
12.15-12.55 **Sergei Evdokimov**, "On orthogonal p-adic wavelet bases"

13.00 – 15.00 Lunch

15.00-15.40 **Yuri Farkov** (co-authored with E.A. Rodionov), "Characterization of refinable step functions on Vilenkin groups"
Coffee Break
16.00-16.40 **Sergey Lukomskii** (co-authored with A.M. Vodolazov), "How to construct wavelets on local fields?"
16.45-17.05 **Gleb Berdnikov** (co-authored with Iuliia S. Kruss), "Discrete dynamic systems in wavelet analysis on Vilenkin groups"
17.10-17.30 **Firdous A. Shah**, "Wavelets associated with nonuniform multiresolution analysis on local fields of positive characteristic"

Section B: Wavelet Transforms and Subdivision   Chairman **Vladimir Protasov**

15.00-15.20 **Andrey Voynov**, "Multivariate refinement equations and subdivisions in L_p-spaces"
15.25-15.45 **Mpfareleni Rejoyce Gavhi-Molefe** (co-authored with B. Han), "Optimal C^3 interpolatory subdivision schemes"
Coffee Break
16.10-16.30 **Ekaterina Pleshcheva**, "Construction of biorthogonal multiwavelet bases"
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16.35-16.55 **Madan Dixit** (co-authored with A. Pathak, P. Yadav), "Convolution for continuous quaternion wavelet transform"
17.00-17.20 **Ashish Pathak**, "Asymptotic approximation of Continuous Wavelet Transform"

Section C: Approximation Theory   Chairman **Andi Kivinukk**

15.00-15.40 **Sergey Platonov**, "On problems of approximation of functions on infinite-dimensional torus"
Coffee Break
15.45-16.25 **Oleg Vinogradov**, "Recent achievments in the problem of constants in the Jackson type inequalities"
16.30-16.50 **Elena Radzievskaya**, "The mean value theorem"
16.55-17.15 **Bayaz Daraby** (co-authored with Z. Solimani), "Finite dimensional fuzzy normed spaces"

June 23

Plenary Lecture   Chairman **Alexander Petukhov**

10.00-11.00 **Mikhail Tchobanou**,
"New requirements and new opportunities for multi-dimensional signals processing"
11.00-11.30 **Coffee Break**

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Section A: Frames   Chairman **Sergey Platonov**

11.30-12.10 **Oleg Reinov**, "A way to generalize a notion of frame"
12.15-12.55 **Shiv Kaushik** (co-authored with Khole Timothy Poumai), "Frames and non linear approximations"
13.00-13.20 **Pavel Terekhin**, "Banach frames in the affine synthesis problem"

Section C: Splines   Chairman **Sergey Lukomskii**

11.30-12.10 **Yuri Volkov**, "Convergence of spline interpolation – review"
12.15-12.55 **Valery Miroshnichenko**, "Exact error bounds for the best approximation by cubic splines"

13.25 **Closing**