

INTERNATIONAL CONFERENCE
" MODERN PROBLEMS OF
MATHEMATICAL ANALYSIS AND
FUNCTION THEORY "

UKRAINE, ZHYTOMYR
SEPTEMBER 24 – 25, 2026

PROGRAMME

September 24, Thursday

9:30 – 10:00	Conference opening
Chair: Sergiy Plaksa	
Section 1 – Hypercomplex Analysis	
10:00 – 10:20	Tetiana Kuzmenko - Different classes of monogenic functions in the three-dimensional noncommutative algebra
10:20 – 10:40	Tamila Kolomiets - ORDERING OF A COMPLEX-VALUED SAMPLE BY THE METHOD OF MUTUAL PLACEMENT OF COMPLEX POINTS
10:40 – 11:00	Maksym Tkachuk - An Analog of Tolstov Theorem in a Commutative Three-Dimensional Banach Algebra
11:00 – 11:20	Vitalii Shpakivskyi - Cauchy's mean value theorem in commutative algebras
Section 2 – Extremal Problems	
11:20 – 11:40	Andriy Targonskii - MOSAIC SYSTEM OF POINTS
11:40 – 12:00	Herman Korsunskyi / Nataliia Parfinovych - On the best non-symmetric relative approximations of some convolution classes by generalized splines
12:00 – 12:30	Coffee Break
Chair: Oleh Skaskiv	
Section 3 – Problems of Mathematical Physics	
12:30 – 12:50	Андрій Грищук - Геометрична інтерпретація Лоренц-інваріантної модифікації рівняння Шредінгера
12:50 – 13:10	Андрій Грищук / Платон Корнійчук / Василь Гуцул - Математичне моделювання енергетичного спектра та хвильових функцій електрона у гексональних наногетероструктурах
13:10 – 13:30	Roman Kolomiets - The use of a two-dimensional kinematic linear Kalman filter with robust Huber correction for filtering a heart rate signal
13:30 – 15:00	Lunch
Chair: Andrii Hryshchuk	
Section 4 – Mathematical and Complex Analysis	
15:00 – 15:20	Nataliya Ilkevych / Denys Romash / Evgeny Sevost'yanov - On the uniform boundary separation for spatial mappings in variable domains
15:20 – 15:40	Victoria Desyatka / Oleksandr Dovhopiatyi / Evgeny Sevost'yanov - CONTINUOUS EXTENSIONS OF OPEN DISCRETE MAPPINGS WITH INTEGRAL CONSTRAINTS
15:40 – 16:00	Valery Targonskii / Evgeny Sevost'yanov - KOEBE THEOREM FOR ORLICZ-SOBOLEV CLASSES
16:00 – 16:20	Andrii Kuryliak - ARGUMENTS OF THE TAYLOR COEFFICIENTS AND GROWTH OF AN ENTIRE FUNCTIONS
16:20 – 16:50	Coffee Break
Chair: Nataliia Parfinovych	

16:50 – 17:10	Sergiy Favorov - FOURIER QUASICRYSTALS: THEOREMS AND PROBLEMS
17:10 – 17:30	Sergiy Plaksa - Estimates of the solid modulus of continuity of the logarithmic double layer potential
17:30 – 17:50	Evgeny Sevost'yanov - On Caratheodory theorem on Riemannian surfaces
17:50 – 18:10	Oleh Skaskiv / Andriy Bandura - SOME OPEN PROBLEMS IN FUNCTION THEORY OVER 35 YEARS OF MATEMATYCHNI STUDII
18:10 – 18:40	Coffee Break
Chair: Sergiy Favorov	
18:40 – 19:00	Victoria Desyatka - On continuous extension of Orlicz-Sobolev classes
19:00 – 19:20	Zarina Kovba / Evgeny Sevost'yanov - UPPER MODULUS ESTIMATES IN ONE CLASS OF MAPPINGS
Section 5 – Probability Theory and Mathematical Statistics	
19:20 – 19:40	Valeriya Kotelnikova - Limit theorems for Karlin's occupancy scheme
19:40 – 20:00	Svitlana Postova - MATHEMATICAL MODELING OF DYNAMIC PROCESSES IN COMPUTER SYSTEMS
20:00 – 23:00	Friendly dinner

September 25, Friday

Chair: Evgeny Sevost'yanov	
Section 1 – Hypercomplex Analysis	
9:30 – 9:50	Sergiy Gryshchuk / Sergiy Plaksa - A HYPERCOMPLEX METHOD OF SOLVING THE DIRICHLET PROBLEM FOR THE LAMÉ SYSTEM
Section 2 – Extremal Problems	
9:50 – 10:10	Alexander Ukhlov - Variational eigenvalues on metric measure spaces
10:10 – 10:30	Oleksandr Pokutnyi - Discrete equations and extremal problems
Section 3 – Problems of Mathematical Physics	
10:30 – 10:50	Manoj Kumar - A Novel Hybrid L1-DGJM Approach for Fractional Differential Equations Involving the Caputo–Fabrizio Operator
10:50 – 11:10	Sergiy Gryshchuk / D. Stupak - CLASSES OF EXTENSIONS OF GRADIENTS ASSOCIATED WITH MONOGENIC FUNCTIONS
11:10 – 11:40	Coffee Break
Chair: Vitalii Shpakivskyi	
Section 4 – Mathematical and Complex Analysis	
11:40 – 12:00	Volodymyr Kimak / Andriy Zagorodnyuk - ω_n -SYMMETRIC POLYNOMIALS ON BANACH SPACES
12:00 – 12:20	Andriy Bandura - Growth of analytic in the unit polydisc functions of bounded L-index in a direction

12:20 – 12:40	Andriy Bodnarchuk / Salo T. M. / Skaskiv O. B. - Laplace-Stieltjes type integrals: the Borel relation and the h-measure of an exceptional set
12:40 – 13:00	Melkana Brakalova-Trevithick - QUANTITATIVE REGULARITY AT LEBESGUE POINTS OF THE BELTRAMI COEFFICIENT
13:00 – 13:20	Miodrag Mateljevic - Schwarz lemma for harmonic maps
13:20 – 14:50	Lunch
Chair: Evgeny Sevost'yanov	
14:50 – 15:10	Ruslan Salimov / Mariia Stefanchuk - Power-type distortion estimates for solutions of the Beltrami equation with two characteristics
15:10 – 15:30	Vladimir Gol'dshtein - SOBOLEV INEQUALITIES FOR DIFFERENTIAL FORMS
15:30 – 15:50	Sviatoslav Dubei / Skaskiv O. B. / Bandura A. I. / Salo T. M. - Entire functions of several variables: behaviour of directional derivatives
15:50 – 16:10	Tomasz Adamowicz - Hardy spaces of mappings
Section 5 – Probability Theory and Mathematical Statistics	
16:10 – 16:30	Олександр Курченко / Ольга Синявська - Бакстерівська оцінка параметра одного випадкового процесу Матерна
16:30 – 17:00	Coffee Break
Chair: Vitalii Shpakivskyi	
17:00 – 17:20	Vitalii Miroshnychenko - Differentiable upper bound function framework for surrogate mixing probabilities construction in a model of mixture of varying concentrations
17:20 – 17:40	Andrii Poberezhets - Asymptotic normality of alternative drift estimators in the CKLS model
17:40 – 18:00	Olexandr Poberezhets - TEMPERED FRACTIONAL ORNSTEIN–UHLENBECK PROCESSES: ASYMPTOTICS AND INFERENCE
18:00 – 18:20	Ievgen Turchyn - A New Arctan-Tan-G Family of Distributions with Applications
18:20 – 18:40	Yuliya Mishura - Hadamard fractional Brownian motion and other Gaussian Volterra processes
18:40 – 19:00	Closing of the Conference