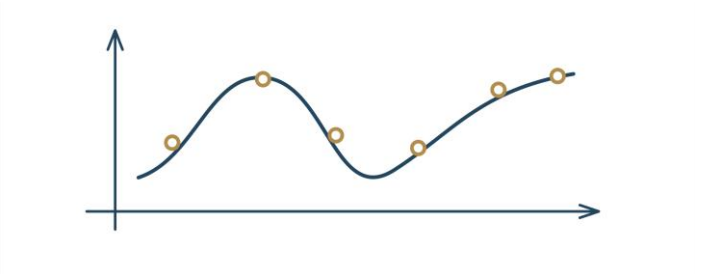
4 November 2026 · Almaty

2026 жылғы 4 қараша · Алматы

International Conference 04

Inverse Problems, Mathematical Modelling and Artificial Intelligence

Кері есептер, математикалық модельдеу
және жасанды интеллект



Abai Kazakh National Pedagogical University

Абай атындағы Қазақ ұлттық педагогикалық университеті

Faculty of Mathematics and Physics, Assembly Hall
86 Tole Bi Street, Almaty

Математика және физика факультеті акт залы
Алматы қаласы, Төле би көшесі, 86

Secretariat · Хатшылық

Sotsialova Ulpan K. / Социалова Ұлпан Қанатқызы · +7 776 218 12 19

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Contact Telephone **Байланыс телефоны**	+7(776) 218 12 19, onz.kazakhstan@gmail.com

Plenary Session / Пленарлық отырыс

Venue **Өтетін орны**	Faculty of Mathematics and Physics, Assembly Hall Математика және физика факультеті, акт залы
Moderators **Модераторлар**	**Kabanikhin Sergey I.** **Bektemessov Maktagali A.**
Secretary **Хатшы**	**Sotsialova Ulpan K.**

Time Уақыт	Event Іс-шара
08:30–09:00	**Participant Registration** Қатысушыларды тіркеу
09:00–09:10	**Conference Opening** **Introduction of the Moderators and Session Procedure. Welcome Addresses** Конференцияның ашылуы Модераторлар мен жұмыс тәртібін таныстыру. Құттықтау сөздер **Tlep Bolat A. / Тілеп Болат Анапияұлы** Chairman of the Management Board – Rector, NJSC «Abai Kazakh National Pedagogical University» Басқарма төрағасы — ректор, «Абай атындағы Қазақ ұлттық педагогикалық университеті» КЕАҚ **Sultan Yertai / Сұлтан Ертай** Vice-Rector for Research and Innovation, Abai KazNPU Зерттеу қызметі және инновация жөніндегі проректор, Абай атындағы ҚазҰПУ
09:10–09:30	**Ultrasound Tomography in Geophysics and Medicine** Геофизика мен медицинадағы ультрадыбыстық томография **Kabanikhin Sergey I. / Кабанихин Сергей Игоревич** DSc (Physics and Mathematics), Professor, Corresponding Member, RAS, Sobolev Institute of Mathematics, SB RAS, Novosibirsk State University, Russia ф.-м.ғ.д., Профессор, Корреспондент-мүше, РҒА, РҒА СБ С.Л. Соболев атындағы Математика институты, Новосибирск мемлекеттік университеті, Ресей
09:30–09:50	**Cable-Driven Parallel Robots** Арқанды параллель роботтар **Jomartov Asylbek A. / Джомартов Асылбек Абдразакович** DSc (Engineering), Professor, Corresponding Member, NEA RK, U.Joldasbekov Institute of Mechanics and Engineering, Kazakhstan т.ғ.д., Профессор, Корреспондент-мүше, ҚР ҰИА, Ө.А. Жолдасбеков атындағы Механика және машинатану институты, Қазақстан

Time Уақыт	Event Іс-шара
09:50–10:10	**On a Boundary Value Problem for an Operator with a Variable Domain** Анықталу облысы айнымалы операторға арналған бір шеттік есеп туралы **Dzhenaliev Muvasharkhan T. / Дженалиев Мувашархан Танабайұлы** DSc (Physics and Mathematics), Professor, Institute of Mathematics and Mathematical Modeling, Kazakhstan ф.-м.ғ.д., Профессор, Математика және математикалық модельдеу институты, Қазақстан
10:10–10:30	**Free Vibration of Angle-Ply Laminated Cylindrical Shells Using Chebyshev Polynomials** Чебышев полиномдарын қолданып, қабаттары бұрышпен орналасқан көпқабатты цилиндрлік қабықтардың еркін тербелістері **Viswanathan Kodakkal Kannan** PhD, Professor, Sharof Rashidov Samarkand State University, Uzbekistan PhD, Профессор, Шароф Рашидов атындағы Самарқанд мемлекеттік университеті, Өзбекстан
10:30–10:50	**Problem for Functional-Hyperbolic Systems with Distributed Parameters** Параметрлері үлестірілген функционалдық-гиперболалық жүйелерге арналған есеп **Asanova Anar T. / Асанова Анар Тұрмағанбетқызы** DSc (Physics and Mathematics), Professor, Institute of Mathematics and Mathematical Modeling, Kazakhstan ф.-м.ғ.д., Профессор, Математика және математикалық модельдеу институты, Қазақстан
10:50–11:10	**On Transformation Operators for Third-Order Linear Differential Operators** Үшінші ретті сызықтық дифференциалдық операторларға арналған түрлендіру операторлары туралы **Kanguzhin Baltabek E. / Кангужин Балтабек Есматович** DSc (Physics and Mathematics), Professor, Al-Farabi KazNU, Kazakhstan ф.-м.ғ.д., Профессор, Әл-Фараби атындағы ҚазҰУ, Қазақстан
11:00–11:20	**Coffee Break**
11:30–11:40	**Video “Academician Gakhip Ualiyev: Life and Scientific Journey”** «Академик Ғахип Уәлиев: өмірі мен ғылыми жолы» бейнеролигі
11:40–12:00	**Digitalization and Artificial Intelligence: A Paradigm Shift in Education** Цифрландыру және жасанды интеллект: білім берудегі парадигмалық өзгеріс **Bidaibekov Yessen Y. / Бидайбеков Есен Ықыласұлы** DSc (Pedagogical Sciences), Professor, Abai KazNPU, Kazakhstan п.ғ. д., Профессор, Абай атындағы ҚазҰПУ, Қазақстан

Time Уақыт	Event Іс-шара
12:00–12:20	**Hybrid Mathematical Models in Epidemiology: Inverse Problems and Optimal Control** Эпидемиологияның гибридті математикалық модельдері: кері есептер және оңтайлы басқару **Krivorotko Olga I. / Криворотько Ольга Игоревна** Professor, Sirius University of Science and Technology, Russia Профессор, «Сириус» ғылыми-технологиялық университеті, Ресей
12:20–12:40	**Large Language Model for the Kazakh Language: From Mathematical Formulation to Applied Systems** Қазақ тіліне арналған үлкен тілдік модель: математикалық қойылымнан қолданбалы жүйелерге дейін **Mansurova Madina Ye. / Мансурова Мадина Есімханқызы** CandSc (Physics and Mathematics), Professor, Al-Farabi KazNU, Kazakhstan ф.-м.ғ. к., Профессор, әл-Фараби атындағы ҚазҰУ, Қазақстан
12:40–13:00	**Parameter Identification in a Mathematical Model of Tumour Growth Using Regularization** Регуляризацияны қолданып, ісіктің өсуінің математикалық моделінің параметрлерін сәйкестендіру **Bektemesov Zholaman M. / Бектемесов Жоламан Мақтағалиұлы** PhD, Research Associate Professor, Almaty University of Power Engineering and Telecommunications, Kazakhstan PhD, зерттеуші-доцент, Алматы энергетика және байланыс университеті, Қазақстан
	Closing of the Conference Plenary Session. Конференцияның пленарлық отырысының аяқталуы.

Parallel Sessions / Секциялық отырыстар

4 November 2026 · 2026 жылғы 4 қараша · 14:00–18:40

№	Session / Секция	Moderators / Модераторлар	Venue / Өтетін орны
1.1	Inverse Problems, Mathematical Modeling and Artificial Intelligence Кері есептер, математикалық модельдеу және жасанды интеллект	Bektemessov M.A. Бектемесов М.А.	Abai KazNPU, Assembly Hall Абай атындағы ҚазҰПУ, Акт залы
1.2	Inverse Problems, Mathematical Modeling and Artificial Intelligence Кері есептер, математикалық модельдеу және жасанды интеллект	Kassenov S.E.;Bektemessov Zh.M. Қасенов С.Е.; Бектемесов Ж.М.	Abai KazNPU, Room 406 Абай атындағы ҚазҰПУ, № 406 аудитория
2	Physics, Robotics and Digital Technologies Физика, робототехника және цифрлық технологиялар	Ualiyev Z.G. Уәлиев З.Г.	Abai KazNPU, Room 107, named after Academician G. Ualiyev Абай атындағы ҚазҰПУ, академик Г. Уәлиев атындағы № 107 аудитория
3	Digitalization and Artificial Intelligence in Education Білім берудегі цифрландыру және жасанды интеллект	Sydykhov B.D.; Kamalova G.B. Сыдыхов Б.Д.; Камалова Г.Б.	Abai KazNPU, SMART Classroom No. 306 Абай атындағы ҚазҰПУ, № 306 SMART-аудитория

Session 1.1 / 1.1-секция

Inverse Problems, Mathematical Modeling and Artificial Intelligence

Кері есептер, математикалық модельдеу және жасанды интеллект

Moderator / Модератор: M.A. Bektemessov, DSc in Physics and Mathematics, Professor, Academician of the NAS RK/

Venue / Өтетін орны: Faculty of Mathematics and Physics, Abai Kazakh National Pedagogical University, Assembly Hall, 3rd Floor / Абай атындағы Қазақ ұлттық педагогикалық университеті, Математика және физика факультеті, мәжіліс залы, 3-қабат

Zoom link/ Zoom сілтемесі: https://zoom.us/j/98164308680?pwd=PprbdIqXWoCUhEDSDrt3YbxIXNvGe9.1

Meeting ID/Конференция идентификаторы: 981 6430 8680
Passcode/ коды: 263579

Time	Presenter	Presentation Title
14:00–14:10	**Yergaliyev M.G.** PhD, Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan	Inverse Problems for Parabolic Equations in Degenerate Domains
14:10-14:20	**Shakir A.G.,** Serovaisky S.Ya. PhD, Al-Farabi Kazakh National University, Almaty, Kazakhstan	Inverse Problem of Epidemic Spread Across a Territory
14:20-14:30	**Sakabekov A.S.,** Madaliyeva S.N., Ergazina R. Professor, K. I. Satbayev Kazakh National Research Technical University, Almaty, Kazakhstan	Inverse Coefficient Problems for a Two-Dimensional System of Moment Equations for Determining the Velocity of Motion and the Surface Temperature of a Body
14:30-14:40	**Baitulenov Zh.B.** Associate Professor, Al-Farabi Kazakh National University, Almaty, Kazakhstan	Modification of the Fictitious Domain Method for a Nonlinear Hydrodynamic Model
14:40-14:50	**Sadybekov M.A.,** Aubakirova G.A. Professor, Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan	Inverse source problems for the Poisson equation in a disk
14:50-15:00	**Asanov A.A.,** Asanov R.A. Professor, Institute of Mathematics, National Academy of Sciences of the Kyrgyz Republic, Bishkek, Kyrgyzstan	On a Class of Systems of Nonlinear Fredholm Integral Equations of the Third Kind in the Space of Contiuous Bounded Vector-Functions on a Semi-Axis
15:00-15:10	**Kadenova Z.A.,** Bekeshova D.A., Sultanmakhmutova G.S. Professor, Institute of Mathematics, National Academy of Sciences of the Kyrgyz Republic, Bishkek, Kyrgyzstan	One Class of Linear Integral Equations of the Third Kind on the Semi-Axis
15:10-15:20	**Sultan A.D.** PhD, International University of Information Technology, Almaty, Kazakhstan	Coupled Heat-Moisture Analysis of Geometry-Optimized Building Facades
15:20-15:30	**Zvonareva T.A.,** Krivorotko O.I. Candidate of Physical and Mathematical Sciences, Sirius University of Science and Technology, Sirius, Russia	Numerical Analysis and Solution of Inverse Problems for Identifying Parameters of Information Propagation Models in Online Social Networks

15:30-15:40	**Iskakov K.T.,** Zhanseitova A.M., Kusainova A.T. Professor, L.N. Gumilyov Eurasian National University, Astana, Kazakhstan	GPR-Based Methodology for Georadiolocation Diagnostics of Engineering Utility Networks Using the OKO-3 Ground-Penetrating Radar
15:40-15:50	**Sultanov M.A.,** Nurlanuly E., Sarsenov B.T. Professor, Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan	Numerical Solution of an Inverse Robin Boundary Problem for the Poisson Equation
15:50-16:00	**Kuznetsov I.V.,** Antontsev S. Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan	On several mathematical properties of the Penrose matter
16:00-16:10	**Soltanbekova K.K.,** Kassenov S.E. D. Serikbayev East Kazakhstan Technical University, Ust-Kamenogorsk, Kazakhstan	Inverse Problem of Determining the Overall Heat Transfer Coefficient in the One-Dimensional Pennes Equation
16:10-16:20	**Khuzhakhmetov J.Zh.,** Kanguzhin B.E. Abai Kazakh National Pedagogical University, Almaty, Kazakhstan	Characteristic Determinant and Eigenvalue Asymptotics of a Sturm–Liouville Problem with Nonlocal Vertex Conditions on a Binary Tree
16:20-16:30	**Ivanov D.K.,** Vabishchevich P.N., Temirbekova L.N. Associate Professor, M.K. Ammosov North-Eastern Federal University, Yakutsk, Russia	Numerical Determination of the Anomaly Source Region in an Inverse Gravity Problem
16:30-16:40	**Shcherbina Ya.O.,** Krivorotko O.I. Sirius University of Science and Technology, Sirius, Russia	Solving an Inverse Problem in Epidemiology Using a Physics-Informed Neural Network with Fine-Tuning Capabilities
16:40-16:50	**Akulova S.R.,** Krivorotko O.I., Kaminsky G.D. Sirius University of Science and Technology, Sirius, Russia	Identification of Factors Contributing to Regional Heterogeneity in the Tuberculosis Epidemic in Russia Based on Mathematical Modeling
16:50-17:00	**Akindinov G.D.,** Pronin K.A. Moscow Institute of Physics and Technology, Moscow, Russia	Reconstruction of the Parameters of an Advection–Diffusion Model of a Contaminant from Incomplete Observations

Session 1.2 / 1.2-секция

Inverse Problems, Mathematical Modeling and Artificial Intelligence

Кері есептер, математикалық модельдеу және жасанды интеллект

Moderators / Модераторлар: Kassenov S.E.;Bektemessov Zh.M.

Venue / Өтетін орны: Abai KazNPU, Room 406/ Абай атындағы ҚазҰПУ, № 406 аудитория

ZOOM Link / ZOOM сілтемесі: https://zoom.us/j/98164308680?pwd=PprbdIqXWoCUhEDSDrt3YbxIXNvGe9.1
Meeting ID / Конференция идентификаторы: 981 6430 8680
Passcode / Кіру коды:263579

Time	Presenter	Presentation Title
14:00–14:05	**Satybaldina A.N.,** Ydyrys A.Zh. Kazakhstan-British Technical University, Almaty, Kazakhstan	Direct and inverse problems for one-dimensional transient heat conduction in layered soils
14:05–14:10	**Kadylkhanuly E.** Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan	Solvability of a pseudohyperbolic equation with nonlocal and nonstandard growth conditions
14:10–14:15	**Kabulova A.A.,** Kassenov S.E. D. Serikbayev East Kazakhstan Technical University, Ust-Kamenogorsk, Kazakhstan	Solving inverse problems for the diffusion-advection-reaction equation using the Newton–Kantorovich method
14:15–14:20	**Abdykalikova A.A.,** Birgebaev A.B. Abai Kazakh National Pedagogical University, Almaty, Kazakhstan	On the smoothness of solutions to a differential equation in [space not specified in the source]
14:20–14:25	**Baitureeva A.R.,** Rysbaiuly B. Al-Farabi Kazakh National University, Almaty, Kazakhstan	An inverse problem for identifying the thermophysical parameters of soil in the presence of noise in the input data
14:25–14:30	**Marat A.R.** Astana IT University, Astana, Kazakhstan	Development of a numerical method for solving the direct and inverse contact heat-transfer problem
14:30–14:35	**Marat G.S.** Al-Farabi Kazakh National University, Almaty, Kazakhstan	Determining the thermophysical parameters of a material based on the hyperbolic heat conduction equation
14:35–14:40	**Berkutbaev A.B.,** Akhmetov T.K. International University of Information Technologies, Almaty, Kazakhstan	Comparative analysis of machine learning methods for forecasting oil prices
14:40–14:45	**Asubai A.O.,** Rysbaiuly B. Al-Farabi Kazakh National University, Almaty, Kazakhstan	An inverse heat conduction problem for a two-dimensional rhombic anisotropic body
14:45–14:50	**Izeev S.N.,** Zhakebaev D.B. Al-Farabi Kazakh National University, Almaty, Kazakhstan	Development of a quantum algorithm for pricing financial options

14:50–14:55	**Isaeva N.T.** Abai Kazakh National Pedagogical University, Almaty, Kazakhstan	Numerical simulation of hyperbolic systems with dynamic boundary conditions based on the Rusanov scheme
14:55–15:00	**Kuanyshbek B.A.,** Bektemesov M.A., Bektemesov Zh.M. Al-Farabi Kazakh National University, Almaty, Kazakhstan	Solving the inverse problem for a lactate kinetics model in a brain tumor
15:00–15:05	**Orysbek A.A.,** Kassenov S.E., Adil N. Abai Kazakh National Pedagogical University, Almaty, Kazakhstan	Numerical solution of the inverse problem for the Helmholtz equation
15:05–15:10	**Turlybek Zh.G.,** Kassenov S.E. Al-Farabi Kazakh National University, Almaty, Kazakhstan	Numerical solution of the continuation problem for the electrodynamics equation
15:10–15:15	**Abaiuly T.** Al-Farabi Kazakh National University, Almaty, Kazakhstan	Identification of the parameters of a lactate kinetics model in the brain in the presence of glioma
15:15–15:20	**Amire A.B.,** Sotsialova U.K., Sarsenova F.S. Abai Kazakh National Pedagogical University, Almaty, Kazakhstan	Solving an inverse problem for the Solow mathematical model using the differential evolution algorithm
15:20–15:25	**Kazez E.,** Abdiramanov Zh.A. Abai Kazakh National Pedagogical University, Almaty, Kazakhstan	Numerical method with a fast SOE algorithm for the fractional wave equation with memory
15:25–15:30	**Doschanova M.K.,** Kerizbaeva A.E., Tleulesova A.M. M. Auezov South Kazakhstan University, Shymkent, Kazakhstan	Numerical methods for solving a nonlinear two-compartment model
15:30–15:35	**Maksumova Zh.K.,** Tleulesova A.M., Kassenov S.E., Mambetova A.N. M. Auezov South Kazakhstan University, Shymkent, Kazakhstan	Numerical methods for solving the direct problem for tumor growth dynamics models
15:35–15:40	**Tugenbaeva Zh.S.,** Kassenov S.E. Al-Farabi Kazakh National University, Almaty, Kazakhstan	A numerical algorithm for solving the inverse problem of a tumor growth model
15:40–15:45	**Imanbekov M.A.,** Kassenov S.E., Adil N. Abai Kazakh National Pedagogical University, Almaty, Kazakhstan	Application of the layer-by-layer iterative recalculation method to solving inverse problems
15:45–15:50	**Shazyndaeva M.K.,** Khompysh Kh., Ardak K. Al-Farabi Kazakh National University, Almaty, Kazakhstan	An inverse problem of recovering boundary data for a time-fractional pseudo-parabolic equation
15:50–15:55	**Abetai A.A.,** Sotsialova U.K., Sarsenova F.S. Abai Kazakh National Pedagogical University, Almaty, Kazakhstan	Application of [term not specified in the source] regularization in linear machine learning

15:55–16:00	**Mukhambetkaliev M.B.,** Khompysh Kh. Al-Farabi Kazakh National University, Almaty, Kazakhstan	Boundary inverse problem for a time-fractional pseudoparabolic equation
16:00–16:05	**Sadullaev E.B.,** Bektemesov M.A. Al-Farabi Kazakh National University, Almaty, Kazakhstan	Analysis of parameter identifiability in a brain tumor kinetic model
16:05–16:10	**Dauletbai M.N.,** Kassenov S.E., Tleulesova A.M. M. Auezov South Kazakhstan University, Shymkent, Kazakhstan	Finite element implementation of the direct two-dimensional magnetotelluric problem in the FEniCSx environment
16:10–16:15	**Rysbaeva K.B.,** Rysbaeva N.B. Kazakhstan-British Technical University, Almaty, Kazakhstan	An ill-posed inverse problem of nonlinear moisture transport
16:15–16:20	**Bakytbekova B.D.,** Kassenov S.E. D. Serikbayev East Kazakhstan Technical University, Ust-Kamenogorsk, Kazakhstan	Regularization of the continuation problem for a hyperbolic equation using Tikhonov's method
16:20–16:25	**Sakhanova Zh.A.,** Kassenov S.E. D. Serikbayev East Kazakhstan Technical University, Ust-Kamenogorsk, Kazakhstan	Numerical solution of the continuation problem for the electrodynamics equation
16:25–16:30	**Zhumagazieva A.S.**, Temesheva S.M. Al-Farabi Kazakh National University, Almaty, Kazakhstan	On an inverse problem of impulse suppression of oscillations in a Duffing oscillator
16:30–16:35	**Bekzat S.B.,** Bektemesov Zh.M., Sotsialova U.K. Al-Farabi Kazakh National University, Almaty, Kazakhstan	Numerical solution of the forward and inverse problems for a tumor growth model: PINNs and Tikhonov regularization
16:35–16:40	**Akimzhanova Sh.A.,** Sakabekov A.S. K. I. Satbayev Kazakh National Research Technical University, Almaty, Kazakhstan	One-dimensional nonlinear nonstationary Boltzmann moment system equations with macroscopic boundary conditions
16:40–16:45	**Meldebekova S.K.,** Bakanov G.B. Khoja Akhmet Yassawi International Kazakh-Turkish University, Turkistan, Kazakhstan	Stability assessment of discrete analogues of the integral geometry problem with a weight function
16:45–16:50	**Imamberdieva M.A.,** Bektemesov Zh.M. Al-Farabi Kazakh National University, Almaty, Kazakhstan	Identification of the parameters of the Fisher–Kolmogorov tumor growth model using noisy data on tumor radius
16:50–16:55	**Sarsengalieva A.S.,** Bekova G.T. L. N. Gumilyov Eurasian National University, Astana, Kazakhstan	Conservation laws for the (2+1)-dimensional Fokas–Lenells equation
16:55–17:00	**Kubanychbekov T.N.,** Rysbaiuly B. Astana IT University, Astana, Kazakhstan	Numerical simulation of nonstationary heat transfer with a nonlinear radiative-convective boundary condition
17:00–17:05	**Tanashova M.E.,** Temirbekov N.M. Al-Farabi Kazakh National University, Almaty, Kazakhstan	Comparative analysis of data assimilation methods in mathematical and computer modeling problems

Session 2 / 2-секция

Physics, Robotics and Digital Technologies

Физика, робототехника және цифрлық технологиялар

Moderator / Модератор: Ualiyev Z.G.

Venue / Өтетін орны: Abai KazNPU, SMART Classroom No. 306 / Абай атындағы ҚазҰПУ, № 306 SMART-аудитория

ZOOM Link / ZOOM сілтемесі: https://zoom.us/j/98164308680?pwd=PprbdIqXWoCUhEDSDrt3YbxIXNvGe9.1
Meeting ID / Конференция идентификаторы: 981 6430 8680
Passcode / Кіру коды:263579

Time	Presenter	Presentation Title
14:00-14:10	**Dzhomartov A.A.,** Abduraimov A.E., Kamal A.N. Professor, IMMash named after U.A. Dzholdasbekov, Almaty, Kazakhstan.	Development of a Cable-Suspended Parallel Robot for Loading and Unloading Operations
14:10-14:20	**Eremin M.O.,** Eremina M. PhD, Institute of Strength Physics and Materials Science SB RAS, Tomsk, Russia.	Application of Coupled Hydromechanical Models to Solving Problems in the Mechanics of Fluid-Saturated Media
14:20-14:30	**Bisembayev K.K.,** Zhamenkeyev E.K., Sultanova K. Professor, IMMash named after U.A. Dzholdasbekov, Almaty, Kazakhstan.	Dynamics of a Rigid Body on Rolling Bearings with Straightened Surfaces, Taking into Account Rolling Friction on Viscoelastic Soil
14:30-14:40	**Kirgizbayev Zh.K.,** Mukharlyamov R.G. Professor, M. Auezov South Kazakhstan University, Shymkent, Kazakhstan.	On the Derivation of the Equations of Dynamics for a System of Variable-Mass Rigid Bodies
14:40-14:50	**Myrzaliyev D.S.,** Seidullayeva O.B. Professor, M. Auezov South Kazakhstan University, Shymkent, Kazakhstan.	Investigation of the Stress-Strain State of a Gear Wheel Using Machine Learning and Inverse Problem Methods
14:50-15:00	**Ispulov N.A.,** Abdollayeva A.S., Akhylbek N., Dzhakitov A.D. Professor, Toraighyrov University, Pavlodar, Kazakhstan.	Identification of the Effective Electroelastic Constant of an Orthorhombic Piezoelectric Crystal of Symmetry Class mm2 from the Frequency Dependence of the Wavenumber
15:00-15:10	**Shcherbakova M.P.,** Yatsun S.F., Yatsun A.S., Derevyanko R.V. Southwest State University, Kursk, Russia.	EMG Investigation of Lower-Limb Patterns During Exoskeleton-Assisted Walking
15:10-15:20	**Iskakov Zh.I.,** Kamal A., Dzhomartov A., Abduraimov A. Professor, IMMash named after U.A. Dzholdasbekov, Almaty, Kazakhstan.	Modeling the Dynamics of a Weakly Gyroscopic Rotor System with Viscoelastic Support Characteristics
15:20-15:30	**Ualiyev Z.G.** IMMash named after U.A. Dzholdasbekov, Almaty, Kazakhstan.	Dynamic Models of Mechanical Systems with Variable Characteristics
15:30-15:40	**Zhdanov A.V.** Laboratory of Forensic Expert Research LLP, Almaty, Kazakhstan.	Inverse Problem of Estimating Vehicle Deformation Energy from Damage Geometry

15:40-15:50	**Savelyev E.N.** Al-Farabi KazNU, Almaty, Kazakhstan.	A New Concept for Producing Woven Fabric Without Warp Yarns
15:50-16:00	**Gaisin A.T.,** Khadzhiyeva L.A. Al-Farabi KazNU, Almaty, Kazakhstan.	Assessment of Nonlinear Vibrations of Drill Strings Under Seismic Excitation
16:00-16:10	**Efremov D.I.,** Yatsun S.F., Fursov G.A., Derevyanko R.V. Southwest State University, Kursk, Russia.	Mathematical Modeling of the Motion of a Flexible Medical Ureteroscope
16:10-16:20	**Demidov S.M.,** Rashoyan G.V., Romanov A.A., Filippov G.S., Chernetsov R.A. A.A. Blagonravov Institute of Mechanical Engineering RAS, Moscow, Russia.	Vibration Amplitude of a Parallel-Structure Robot for Translational Motion
16:20-16:30	**Sharipov S.U.** K. Zhubanov Aktobe Regional University, Aktobe, Kazakhstan.	Theoretical Investigation of Fringe Electric Field Characteristics in Deflector Plates with Extended Screens
16:30-16:40	**Sabirova Yu.F.,** Khadzhiyeva L.A. Al-Farabi KazNU, Almaty, Kazakhstan.	Mathematical Modeling of the Nonlinear Dynamics of a Drill String with a Continuum Damping Coupling
16:40-16:50	**Khudaibergen B.B.,** Temirbekov A.N., Temirbekov N.M. Al-Farabi KazNU, Almaty, Kazakhstan.	Mineral Prospectivity Mapping Based on Deep Learning Using Multi-Source Geospatial Data and GIS Predictors
16:50-17:00	**Sabirova R.F.,** Sabirova Yu.F., Khadzhiyeva L.A. Al-Farabi KazNU, Almaty, Kazakhstan.	Mathematical Modeling of the Nonlinear Dynamics of a Drill Rod Considering Seismic Effects
17:00-17:10	**Ikramov A.Z.,** Ibraev S.M. Al-Farabi KazNU, Almaty, Kazakhstan.	Inverse Problem of Synthesizing a Nonharmonic Lever-Type Vibration Exciter: Linearity of the Force Acting on the Foundation and the Impulse Potential of the Mechanism
17:10-17:20	**Ensepbay A.M.** Dortrans LLP, Almaty, Kazakhstan.	Improving the Quality of Road Infrastructure as a Factor in Sustainable Urban Development
17:20-17:30	**Dzhantasova M.M.,** Khadzhiyeva L.A. Al-Farabi KazNU, Almaty, Kazakhstan.	Investigation of a Mathematical Model of Nonlinear Bending-Torsional Vibrations of a Drill String
17:30-17:40	**Baltabay D.** L.N. Gumilyov ENU, Astana, Kazakhstan.	Development of an AI-Based Robotic Manipulation System for Intelligent Waste Sorting
17:40-17:50	**Kulkin N.A.,** Khadzhiyeva L.A. Al-Farabi KazNU, Almaty, Kazakhstan.	Mathematical Modeling of Nanoelements in Problems of Continuum Diagnostics
17:50-18:00	**Reginbayeva N.A.** Abai KazNPU, Almaty, Kazakhstan.	Methodological Features of Teaching Physics to Future Air Transport Specialists Based on Mathematical Modeling of Aerodynamic Processes

18:00-18:10	**Zhamenkeyev E.K.** Associate Professor, Abai KazNPU, Almaty, Kazakhstan.	Determination of the Absolute Positions of a Manipulator with Five Revolute Kinematic Pairs from Their Given Relative Positions

Session 3 / 3-секция

Digitalization and Artificial Intelligence in Education

Білім берудегі цифрландыру және жасанды интеллект

Moderators / Модераторлар: Sydykhov B.D.; Kamalova G.B.

Venue / Өтетін орны: Abai KazNPU, SMART Classroom No. 306/Абай атындағы ҚазҰПУ, № 306 SMART-аудитория

ZOOM Link / ZOOM сілтемесі: https://zoom.us/j/98164308680?pwd=PprbdIqXWoCUhEDSDrt3YbxIXNvGe9.1
Meeting ID / Конференция идентификаторы: 981 6430 8680
Passcode / Кіру коды:263579

Time	Presenter	Presentation Title
14:00-14:10	**Makashev E.P.,** Kulmuratova A.Sh. Abai KazNPU, Almaty, Kazakhstan.	Development of a Program for Calculating Outlet Water Temperature Based on the Specified Operating Parameters of Cooling Tower 77-Z-001
14:10-14:20	**Alimova A.N.,** Abdrakhmanov R.E., Nurseitov D.B. PhD, Institute of Information and Computing Technologies, Astana, Kazakhstan.	Application of Computer Vision Methods for the Classification of Game Waterfowl
14:20-14:30	**Kadyrbayeva B.,** Akhmadiyeva B.B. Abai KazNPU, Almaty, Kazakhstan.	Solving Linear Programming Problems Using the Graphical Method
14:30-14:40	**Baikonys A.** Abai KazNPU, Almaty, Kazakhstan.	Design and Development of a Unified Intelligent Information and Educational Portal for the "Open University"
14:40-14:50	**Tulenbayev K.M.,** Koshzhanov R.A., Zharykov M.N., Kettebekov Zh.K., Kovalenko A.A. Associate Professor, Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan.	Sheep Recognition Using Neural Networks
14:50-15:00	**Madibayuly Zh.** PhD, Al-Farabi KazNU, Almaty, Kazakhstan.	Calculating Bridge Stability Using Mathematical Methods and Artificial Intelligence
15:00-15:10	**Kaldanov B.B.,** Bidaibekov E.Y. Abai KazNPU, Almaty, Kazakhstan.	Applications of Artificial Intelligence in the "Concept Tree" Digital Integrator: The Example of Teaching Computer Science in Primary School
15:10-15:20	**Abishova G.B.,** Zaurbekov N.S. Abai KazNPU, Almaty, Kazakhstan.	Designing an Intelligent System for the Dynamic Formation of Individual Learning Trajectorie
15:20-15:30	**Akkulova A.T.,** Salgozha I.T. Abai KazNPU, Almaty, Kazakhstan.	Development of a System of Machine Learning Tasks to Foster Computational Thinking in Upper Secondary School Students

15:30-15:40	**Lozhnikov A.E.**, Marenko V.A. Omsk State Technical University, Omsk, Russia.	Analysis of the Cognitive Model "Leadership Competencies"
15:40-15:50	**Kabdulinov M.O.,** Zhartybayeva M.G. Astana IT University, Astana, Kazakhstan.	Comparative Evaluation of Lexical, Vector, and Hybrid Search in Enterprise RAG Systems
15:50-16:00	**Tulenbayev K.M.**, Kovalenko A.A. Associate Professor, Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan.	Intelligent Prediction of Logistics Risks in the Transportation of Space Equipment
16:00-16:10	**Isakhan A.Zh.** International Engineering and Technological University (METU), Almaty, Kazakhstan.	Evaluation of the Effectiveness of Blockchain Smart Contracts in Logistics
16:10-16:20	**Seidaly R.S.** International Engineering and Technological University (METU), Almaty, Kazakhstan.	Fraud Detection in the Financial Sector Using Artificial Intelligence and Big Data
16:20-16:30	**Kadyrbek A.S.,** Abdildayeva A.A. International Engineering and Technological University (METU), Almaty, Kazakhstan.	LLM-Based Multi-Agent Systems for Automating Software Development Tasks: Planning, Decomposition, Quality Control, and Memory Management
16:30-16:40	**Bisengali A.T.**, Abdildayeva A.A. International Engineering and Technological University (METU), Almaty, Kazakhstan.	A Comprehensive Approach to Social Network Analysis Based on Big Data and Artificial Intelligence Technologies
16:40-16:50	**Sabir B.B.,** Mazakov T.Zh. International Engineering and Technological University (METU), Almaty, Kazakhstan.	Comparative Analysis of Machine Learning Algorithms for Predicting University Students' Learning Outcomes
16:50-17:00	**Tulenbayev K.M.,** Shakirov R.B. Associate Professor, Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan.	Pedagogical Foundations of Training Specialists for Operating UAV Data Transmission Systems
17:00-17:10	**Nurekenova A.S.** D. Serikbayev East Kazakhstan Technical University, Ust-Kamenogorsk, Kazakhstan.	Patient-Level Splitting of Computed Tomography Images in Machine Learning for Osteoporosis Diagnosis
17:10-17:20	**Seitova A.S.,** Temirbekov N.M., Tamabay D.O., Seitova A.S. National Engineering Academy of Kazakhstan, Almaty, Kazakhstan.	Prediction of Zinc Content Using Geoinformation Data and Machine Learning Methods
17:20-17:30	**Musirat E.** Abai KazNPU, Almaty, Kazakhstan.	Design of a Conceptual Model of an AI-Based Adaptive EdTech Platform for Developing Teachers' IT Micro-Qualifications
17:30-17:40	**Zhenisov K.B.** K.I. Satpayev Kazakh National Research Technical University, Almaty, Kazakhstan.	Parameter Identification in a Three-Phase AIAO Model of the Needham–Schroeder Protocol

17:40-17:50	**Turman N.R.** International Engineering and Technological University (METU), Almaty, Kazakhstan.	Development of a Method for Assessing the Quality of Software Projects Based on Key Performance Indicators (KPIs)
17:50-18:00	**Turganbek B.A.** International Engineering and Technological University (METU), Almaty, Kazakhstan.	Using Machine Learning to Predict Consumer Behavior
18:00-18:10	**Smambayev Zh.S.** International Engineering and Technological University (METU), Almaty, Kazakhstan.	Forecasting Prices of Socially Important Food Products in the Regions of Kazakhstan Using Machine Learning Methods
18:10-18:20	**Begaly A.,** Zhartybayeva M.G. L.N. Gumilyov ENU, Astana, Kazakhstan.	RAG-Enhanced LectureAI for Automated Curriculum Alignment Assessment
18:20-18:30	**Li X.,** Kartanova A., Guo B. PhD, I. Razzakov Kyrgyz State Technical University, Bishkek, Kyrgyzstan.	Forecasting the Century-Long Dynamics of Gross Wheat Harvest in Kyrgyzstan Using a Multiscale Temporal Fusion Network
18:30-18:40	**Bazarbayeva U.K.,** Bidaibekov E.Y., Shekerbekova Sh.T., Kaldanov B.B. Abai KazNPU, Almaty, Kazakhstan.	Artificial Intelligence Platforms for Visualizing Educational Information and Creating Infographics: A Review and Comparative Analysis