

International Scientific Conference Modern challenges of inverse problems

dedicated to the 70th anniversary of Professor Alemdar Hasanov Hasanoglu

October 3-5, 2024

Conference Programme

Novosibirsk time: GMT+7



 $\textbf{Zoom:} \ \texttt{https://us02web.zoom.us/j/82680294606?pwd=MzNZRVVvK2YwZGZhZThBUmIxM3BrUT09}$

Conference ID: 826 8029 4606 Access code: 191624

In case of problems logging in to Zoom, you can connect to the **YouTube channel**:

https://youtube.com/channel/UCEfDHH6-AcdAYEaizUzrelw

Saturday, October 5th Sobolev Institute of Mathematics, RAS 305 Room



Zoom

| 9:30-10:00 | Mikhail Klibanov | Convexification method for inverse problems |
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| | University of North Carolina at Charlotte, Charlotte, USA | Convexingation method for inverse problems |
| 10:00-10:30 | Iskakov Kazizat Takuadinovich, Uzakkyzy N., Tyutin | |
| | A.A., Saitova R.B. | Algorithms for solving problems to determine the geoelectric |
| | L.N. Gumilyov Eurasian National University, Astana, | properties of the pavement |
| | Kazakhstan | |
| 10:30-10:50 | Kadenova Zuurakan Azhimamatovna, Asanov A. | Approximation for the Stieltjes integral using the generalized trapezoid rule |
| | Institute of Mathematics of the National Academy of Sciences of | |
| | the Kyrgyz Republic, Bishkek, Kyrgyzstan | trapezoid ruie |
| 10:50-11:10 | Zolotukhina Olga Sergeevna, Dubnishchev Yu.N., | |
| | Arbuzov E.V. | On inverse problems of Hilbert optics |
| | S.S. Kutateladze Institute of Thermophysics, Novosibirsk, Russia | |
| 11:10-11:30 | Coffee | |
| 11:30-11:50 | Vasiliev Vasily Ivanovich, Kardashevsky A.M. | Numerical determination of the convective term of the parabolic |
| | Northeastern Federal University named after M.K. Ammosov, | equation depending on spatial variables |
| | Yakutsk, Russia | |
| 11:50-12:10 | Pyatkov Sergey Grigorievich | Inverse problems of recovering the heat transfer coefficients and |
| | Yugra State University, Khanty-Mansiysk, Russia | related problems |
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| 12:10-12:30 | Marinenko Arkady Vadimovich, Epov M.I. Institute of Petroleum Geology and Geophysics SB RAS, Novosibirsk, Russia | Application of direct current electrical tomography methods to solve problems of mineral deposits search in coal quarries |
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| 12:30-12:50 | Chandragiri Sreelatha Sobolev Institute of Mathematics of SB RAS, Novosibirsk, Russia | Numerical solution of the 3D Poisson equation: An application of gravimetry in Geophysics |
| 12:50-14:00 | Lunch | |
| 14:00-14:20 | Kozhanov Alexander Ivanovich S.L. Sobolev Institute of Mathematics SB RAS, Novosibirsk, Russia | Inverse coefficient problems for degenerate partial differential equations |
| 14:20-14:40 | Kalinin Alexey Vyacheslavovich, Tyukhtina A.A. Lobachevsky Nizhny Novgorod State University, Nizhny Novgorod, Russia | Uniqueness classes of solutions to inverse source problems |
| 14:40-15:20 | Kabanikhin Sergey Igorevich S.L. Sobolev Institute of Mathematics SB RAS, Novosibirsk, Russia | About the scientific heritage of M.M. Lavrentiev |
| 15:20-15:40 | Kamynin Vitaly Leonidovich NRU MEPhI, Moscow, Russia | Invedrse problem of determining the absorption coefficient in parabolic equation with final and integral observation |
| 15:40-16:00 | Ostanin Pavel Antonovich Moscow Institute of Physics and Technology (National Research University), Dolgoprudny, Russia | The inverse problem of reconstructing the electron concentration field in the ionosphere using TEC data |
| 16:00-16:20 | Polyntseva Svetlana Vladimirovna Krasnoyarsk, Russia | On a coefficient inverse problem for a nonlinear parabolic equation |
| 16:20-16:40 | Andreyanova Oksana Alekseevna, Shcheglov A.Yu. Lomonosov Moscow State University, Moscow, Russia | The inverse problem for a hyperbolic equation with a boundary condition containing a second-order derivative |
| 16:40-17:00 | Amosova Elena Vladimirovna IPM FEB RAS, FEFU, Vladivostok, Russia | Optimal control of complex heat exchange |
| 17:00-17:20 | Kasenov Syrym Yerkinovich Al-Farabi Kazakh National University, Almaty, Kazakhstan | Numerical solution of the continuation problem for the Helmholtz equation |