



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



Zoom: <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>



Zoom:

Thursday, October 3rd

Sobolev Institute of Mathematics, RAS

305 Room

9:30-10:00	Jun Zou The Chinese University of Hong Kong, China	Some most effective numerical methodologies for linear and nonlinear inverse problems
10:10-10:40	Masahiro Yamamoto The University of Tokyo, Japan	Recent results on inverse problems for time-fractional diffusion-wave equations
10:45-11:10	Coffee	
11:10-11:40	Mikhail Alexandrovich Guzev, Doludenko A.N., Ermakov A.D., Posdnevskaya A.O., Fortova S.V. Institute of Applied Mathematics of the Far Eastern Branch of the Russian Academy of Sciences, Vladivostok, Institute of Design Automation of the Russian Academy of Sciences, Moscow, Russia	Application of Maslov rank distributions to solve the inverse problem of analyzing two-dimensional and quasi-two-dimensional turbulent flows
11:45-12:15	Vladimir Vasilyevich Vasin, Gainova I.A. Institute of Mathematics and Mechanics of the Ural Branch of the Russian Academy of Sciences, Yekaterinburg, S.L. Sobolev Institute of Mathematics SB RAS, Novosibirsk, Russia	Stable algorithms for inverse problems with additional conditions for solution
12:20-12:50	Gennady Valentinovich Alekseev, Spivak Yu.E. Institute of Applied Mathematics FEB RAS, Far Eastern Federal University, Vladivostok, Russia	Inverse control problems for the magnetohydrodynamics-Boussinesq model of a viscous heat-conducting fluid

12:55-14:00	Lunch	
14:00-14:30	Novikov Roman, Hohage T., Sivkin V. CNRS, Ecole Polytechnique & IEPT RAS, Paris, France	Phase retrieval and phaseless inverse scattering with background information
14:35-15:05	Vasilii Kolokoltsov Lomonosov Moscow State University, Moscow, Russia	On the new theory of optimal taxation
15:10-15:40	Nataliia Obrosova, Shananin A.A. Federal Research Center "Informatics and Management" Russian Academy of Sciences, Moscow, Russia	Mathematical models of intersectoral balance with factors substitution and industrial capacities limitation
15:45-16:10	Coffee	
16:10-16:40	Vladimir Gorbunov Ulyanovsk State University, Ulyanovsk, Russia	Scientific methodology and mathematical modelling of economy
16:40-17:10	Vyacheslav Maximov Institute of Mathematics and Mechanics URB RAS, Ekaterinburg, Russia	The application of a locally regularized extreme shift in the task of implementing a prescribed motion
17:10-17:40	Mikhail Shimelevich, Osborne E.A., Osborne I.E., Rodionov E.A. Sergo Ordzhonikidze Russian State Geological Exploration University, Moscow, Russia	Deep learning methods in nonlinear inverse problems of geophysics
17:40-18:00	Leonid Zotov, Sidorenkov N., Bizouard C., Marchukova O. SAI MSU, Moscow, Russia	Could the tides influence Chandler wobble, LOD, and Atlantic Multidecadal Oscillation?
18:00-18:20	Alexey Shcheglov, Netesov S.V. Lomonosov Moscow State University, MGSU-PPI University, Shenzhen, China	Some inverse problems for a series of population dynamics models with age structuring