

**We invite you to take part in III International Scientific Conference
“DIFFERENTIAL EQUATIONS AND MATHEMATICAL MODELING” (DEMM - 2025)
The conference is dedicated to the 80th anniversary of Dr. Vladimir Nikolaevich
Vragov, Doctor of Physical and Mathematical Sciences, Professor
(August 18-22, 2025, Ulan-Ude, Republic of Buryatia, with a trip to Lake Baikal)**

Dorzhi Banzarov Buryat State University together with Novosibirsk State University, the Academy of Sciences of the Republic of Sakha (Yakutia), and the Filippov Buryat State Agricultural Academy organizes the III International Scientific Conference “Differential Equations and Mathematical Modeling” in Ulan-Ude (Lake Baikal, Maksimikha village, Baikal boarding house, Kolos base) from August 18 to 22, 2025 (in-person or online participation).



The conference is dedicated to the 80th anniversary of the birth of Doctor of Physical and Mathematical Sciences, Professor Vladimir Nikolaevich Vragov, Rector of NSU in 1993–1997.

Vladimir Nikolaevich Vragov was born on October 2, 1945 in the city of Urgench, Uzbek SSR. In 1963, he entered the Mechanics and Mathematics Department of Novosibirsk State University, in 1968 - the graduate school of NSU, in 1969 he was accepted by competition to the Institute of Mathematics in the department of function theory, in 1971 he defended his candidate's dissertation, in 1978 - his doctoral dissertation. In 1976, V.N. Vragov was appointed scientific secretary of the Institute of Mathematics. Soon there was an appointment to the post of vice-rector of NSU, and since 1983 - the first vice-rector. In 1993, he was elected rector of NSU. In 1997, Vladimir Nikolaevich Vragov headed the UNESCO Department in the Siberian Branch and NSU on ecology, environmental protection and sustainable development. Vladimir Nikolaevich's scientific interests were connected with the theory of degenerate equations and equations of mixed type. He obtained profound results on the solvability of the generalized Tricomi problem, on the existence of regular solutions of degenerate elliptic equations, on the analyticity of solutions of problems D and E for degenerate equations, on the solvability of the Cauchy, Goursat and Darboux problems, a mixed problem for degenerate hyperbolic equations of the second order, for degenerate hyperbolic systems of equations according to Friedrichs. V.N. Vragov developed a general approach to the study of equations of mixed type - the "auxiliary operator method".

PROGRAM COMMITTEE CONFERENCE

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Falaleev M.V. – professor (Russia, Irkutsk),

Fedorov V.E. – professor (Russia, Chelyabinsk),

Fedoruk M.P. – Academician of Russian Academy of Sciences (Russia, Novosibirsk),

Shirapov D.Sh. – professor (Russia, Ulan-Ude).

Chebotarev A.Yu. – professor (Russia, Vladivostok),

Choluunbaatar Ochbadrak –Academician of Mongolian Academy of Sciences (Mongolia, Ulaanbaatar).

ORGANIZING COMMITTEE OF THE CONFERENCE

Chairman:

Tsyrenzhapov N.B. – Associate Professor, Head of the Department of FM, IMPhCS, BSU.

Vice-Chairmen:

Antonova L.V. (Associate Professor, Director of IMPhCS, BSU)

Abiduev P.L. (Associate Professor, Head of the Department of ISMI, IMPhCS, BSU),

Scientific Secretary:

Telesheva L.A. (Associate Professor, BSU).

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Bahrinov K.K. (Associate Professor, BSAA)

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Zhigzhitzhapov B.V. (Assistant, BSU),

Makunina T.A. (Senior Lecturer, BSU),

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Nikolaev O.Yu. (Senior Lecturer, BSU),

Trunin D.O. (Associate Professor, BSU),

Urbakhanov A.V. (Associate Professor, BSU),

Khankhasaev V.N. (Associate Professor, BSU),

Khankhasaeva Ya.V. (IAM),

Khabituev B.V. (Senior Lecturer, BSU),

Tsybikov A.S. (Associate Professor, Head of Department, BSU),

Tsydypov S.G-Ts. (Senior Lecturer, Acting Head of Department, BSU),

Yumov I.B. (Associate Professor, BSU).

Organizing Committee Secretariat:

Subanova Namsalma, Khartueva Daria, Tsyrempilova Inessa, Buryukhaev Arthur,
Khankhaev Andrey, Sidenov Dorzhi.

CONFERENCE PROGRAM

The scientific program of the conference covers the following areas: partial differential equations, equations of mathematical physics, ordinary differential equations, dynamical systems, operator theory, spectral theory, mathematical modeling.

The conference program includes reports by invited scientists (30 minutes), plenary reports (30 minutes), short reports (15 minutes) and poster reports.

MAIN SECTIONS OF THE CONFERENCE

1. Non-classical problems of mathematical physics.
2. Degenerate equations and equations of mixed type.
3. Spectral theory of differential operators.
4. Dynamical systems, optimal controls and theory of differential games.
5. Mathematical modeling and computational mathematics.

Working languages of the conference are Russian, English.

RECEIPT OF APPLICATIONS AND ABSTRACTS

Applications and abstracts should be sent by e-mail to the Organizing Committee at: conf.demm2025@yandex.ru or register on the conference website demm.bsu.ru

A collection of abstracts is not planned to be published. The full reports recommended by the Program Committee will be published in top-rated journals (NEFU Mathematical Notes, BSU Bulletin, etc.)

Invitations and additional information will be sent after reviewing the submitted abstracts.

REGISTRATION FEE AND ACCOMMODATION

The registration fee for conference participants is set at approximately 3,000 rubles for in-person participation and 1,000 rubles for remote participation and is paid after receiving notification of the report's inclusion in the program. The registration fee does not include accommodation and meals for participants during the conference.

The procedure for paying the registration fee and accommodating participants in hotels will be announced additionally.

MAIN DATES

- Registration of participants: until May 10, 2025
- Submission of abstracts until June 10, 2025
- Notification of inclusion of a paper in the conference program until June 25, 2025
- Confirmation of participation until July 15, 2025
- Arrival of participants: August 17–18, 2025
- Opening of the conference: August 18, 2025
- Closing of the conference: August 22, 2025
- Departure of participants: August 22–23, 2025

CONTACT DETAILS OF THE ORGANIZING COMMITTEE

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Web-site: demm.bsu.ru

ABSTRACT REQUIREMENTS

for the International Conference

"Differential Equations and Mathematical Modeling"

(DEMM – 2025)

Abstracts up to 2 A4 pages long are submitted in Russian or English as a tex file prepared in the LaTeX editor (template attached). \textwidth=16 cm, \textheight=24 cm, main font size 12 pt. Portrait orientation.

The file name indicates the last name of the first author.

Abstracts are provided as a .zip archive containing a folder named after the first author, containing the original tex file of the abstract, all the used image files (png, jpg, bmp), and the corresponding compiled pdf file.

The UDC index is indicated at the beginning according to the UDC classifier.

Next comes the title of the abstract (no more than 10 words, the use of letters of alphabets other than Russian and Latin, Roman numerals, abbreviations and formulas is not allowed). Next, provide information about the authors (last name, first name, patronymic in full, academic degree, academic title (before the academic title, it is necessary to clearly indicate the phrase "academic title", for example, "academic title professor", "academic title associate professor"), position, place of work (indicate the full official names of organizations, address with postal code, e-mail).

Then, on a new line after the word "Acknowledgments", provide information about gratitude (if any) to organizations or institutions, scientific supervisors and other persons, including links to grants.

Next, provide the text of the abstract.

At the end of the abstract, immediately before the list of references, provide keywords in an amount of at least 10 and no more than 25 words.

For sources in the list of references, you should indicate the numbers/number of pages and DOI (if any). For all electronic resources, it is mandatory to indicate the date of access. The list of references includes only those sources that are referenced in the text of the abstract. The list of references should indicate only published works in the original language (Russian or English).

The list of references does not include any materials that do not have a specific author (laws, standards (including GOSTs), articles from dictionaries and encyclopedias, website

pages) where a specific author is not indicated; references to them are only provided as footnotes in the text of the abstracts.

Important information

As the main speaker, you can submit the abstract of only one report.

The Program Committee will review all received abstracts. The Program Committee reserves the right to reject abstracts that do not correspond to the conference topic or are not formatted in accordance with the requirements.