

ROMANIAN SOCIETY OF APPLIED AND INDUSTRIAL
MATHEMATICS

Neculai Tudor, No. 139, Bl. 1016, Ap. 9, 700713 Iasi

www.romai.ro

- Romanian Society of Applied and Industrial Mathematics - ROMAI,
- Technical University of Moldova, Chisinau, Republic of Moldova,
- Mathematical Society of the Republic of Moldova,
- "Gh. Mihoc - C. Iacob" Institute of Mathematical Statistics and Applied Mathematics of the Romanian Academy - ISMMA,
- Academy of Romanian Scientists – AOSR,
- Tiraspol University of Moldova

cordially invite you to

THE 26th CONFERENCE ON APPLIED AND INDUSTRIAL MATHEMATICS

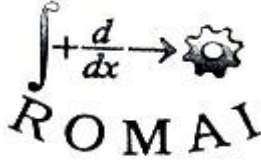
- CAIM 2018 -

The Romanian Society of Applied and Industrial Mathematics (ROMAI), Technical University of Moldova, Mathematical Society of the Republic of Moldova, "Gh. Mihoc - C. Iacob" Institute of Mathematical Statistics and Applied Mathematics of the Romanian Academy (Bucharest), Academy of Romanian Scientists, Tiraspol University of Moldova, announce the organization of the 26th Conference on Applied and Industrial Mathematics - CAIM 2018.

The Conference will be held at the Technical University of Moldova, Chişinău between 20 and 23 of September, 2018.

Objectives of CAIM 2018

CAIM 2018 provides a forum for the review of the recent trends in applied and industrial mathematics either from a qualitative or from a numerical point of view. Since theoretical studies find sooner or later their applicability, the conference has also sections for the theoretical branches of mathematics like algebra or geometry. Computer science communications are welcome. A special section of the conference is dedicated to the mathematical teaching.



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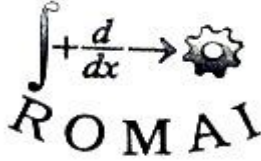
Conference Sections

1. Partial Differential Equations
2. Ordinary Differential Equations, Dynamical Systems;
3. Mathematical Modeling in Engineering and Life Sciences;
4. Real, Complex, Functional and Numerical Analysis;
5. Probability Theory, Mathematical Statistics, Operations Research;
6. Algebra, Logic, Geometry;
7. Computer Science;
8. Education.

Scientific Committee

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Constantin BĂCUTĂ (Delaware, USA),
Cornelia-Livia BEJAN (Iași),
Wladimir-Georges BOSKOFF (Constanța),
Dumitru BOTNARU (Chișinău),
Viorel BOSTAN (Chișinău)
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Sergiu MOROIANU (Bucharest),
Costică MOROȘANU (Iași),
Lidia PALESE (Bari),
Titus PETRILA (Cluj-Napoca),
Mihail POPA (Chișinău),
Vasile POSTOLICĂ (Bacău),
Constantin POPA (Constanța),
Liliana RESTUCCIA (Messina),
Carmen ROȘOREANU (Craiova),
Dana SCHLOMIUK (Montreal),
Bianca SATCO (Suceava),
Ioan STANCU MINASIAN (Bucharest)
Mihaela STERPU (Craiova),
Mirela ȘTEFĂNESCU (Constanța),
Kiyoyuki TCHIZAWA (Tokyo),
Dan TIBA (Bucharest),
Ioan TODINCĂ (Orléans),
Catalin TRENCHIA (Pittsburgh, USA),
Mihai TURINICI (Iași),
Rodica TUDORACHE (Iași),
Acad. Ioan TOMESCU (Bucharest),
Nicolae VULPE (Chișinău),
Gheorghită ZBĂGANU (Bucharest).



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Organizing Committee

President: Costică MOROȘANU (President of ROMAI, UAIC - Iași)
Vicepresident: Viorel BOSTAN (TUM, Chisinau)
Members: Mitrofan CIOBANU (Vice-president of ROMAI, Chișinău)
Călin Ion GHEORGHIU (Vice-president of ROMAI, ICTP, Cluj)
Stelian ION (Secretary of ROMAI, ISMMA, Bucharest)
Anca Veronica ION (ISMMA, Bucharest)
Carmen ROȘOREANU (Vice-president of ROMAI, Univ. of Craiova)
Serban VLAD (Oradea)

Local Organizing Committee (Chișinău)

Viorel BOSTAN (TUM)	Vasile URȘU (TUM)
Mitrofan CIOBANU (Academy of Sciences, TSU)	Leonid DOHOTARU (TUM)
Ion VĂLUȚĂ (TUM)	Galina RUSU (MSU)
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Liubomir CHIRIAC (TSU)	Elena COJUHARI (TUM)
Dumitru COZMA (TSU)	Victor ORLOV (TUM)

Location

CAIM 2018 will take place at the Technical University of Moldova, Chisinau - TUM,
Address: 168, bd. Stefan cel Mare, MD-2004, Chisinau, Republic of Moldova, <http://www.utm.md>,
Tel. +37322509931; +37322509930, Fax: +37322509940, e-mail: caim2018@caim.utm.md

CAIM 2018 Preliminary Program

September 20, 2018

14.00 – 20.00 – Registration at the bloc of study nr.6 of the TUM,
9/8 Studenților, MD-2045, Chisinau

September 21, 2018

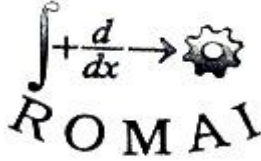
Registration; Opening Ceremony at the Tekwill, ICT Excellence Center,
9/11 Studenților, MD-2045, Chisinau;
Works of the Conference

September 22, 2018

Works of the Conference; ROMAI – General Assembly; Official Dinner.

September 23, 2018

Excursion; Departure of participants.



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Registration

The authors are kindly asked to send the abstracts of their works to the email address conferences.caim@yahoo.com.

The organizers will decide upon the acceptance of the presentations and will communicate to the authors within a week their decision. The authors of accepted papers will receive, together with the decision, a REGISTRATION FORM. This form must be sent back, filled, by the participants, to the address conferences.caim@yahoo.com - **not later than September 7**.

There will be no online registration.

Conference Fees

Registration fee, general: 100 Euro;

Registration fee, ROMAI members: 250 MDL;

Registration fee, special fee: 200 MDL.

The costs of official dinner and the excursion are not included in the above fees.

Payment methods

The foreign participants are kindly asked to pay the conference fee until September 1, to the account in EURO of ROMAI: RO19BRDE445SV10137674160, held at BRD-Groupe Société Générale, SWIFT BRDEROBU.

Participants from Romania and Republic of Moldova may pay either in the account in RON of ROMAI: RO23BRDE445SV00031164160, held at BRD - Groupe Société Générale, TRIUMF, Bucharest, **or at the Registration Desk**.

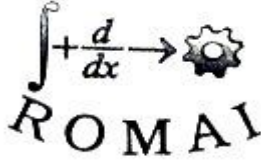
Important Dates

Submission of abstracts deadline: - **August 15**

Notification of acceptance (for presentation): - **August 31**

Confirmation of participation to the conference: - **September 7**

Conference period: - **September 20-23**.



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Abstract and Proceedings

ABSTRACTS.

The abstracts for Sections 1-7 shall be written in English by using the LATEX, while, the abstracts for Section 8 may be written in English or Romanian by using LATEX or Microsoft Word. All abstracts must be sent by email to the address: conferences.caim@yahoo.com.

PROCEEDINGS

The Proceedings of the Conference will be published in ROMAI Journal and ROMAI Educational Journal as special numbers.

The Proceedings will contain only the papers accepted after the reviewing process.

Travel

Chişinău is accessible by train, by plane, or by bus. See below the webpages of the airport in Chişinău and the schedule of trains in Republic of Moldova.

Airport International Chişinău <http://www.airport.md>

Train schedule www.railway.md

Bus schedule www.autogara.md/orar/

The website for travel and tourism <http://www.travel.md>

Accommodation

The participants should make a reservation at one of the hotels below:

<http://www.travel.md/ro/hoteluri/>

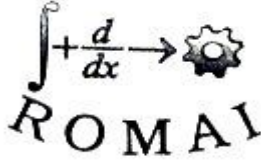
A limited number of rooms at low cost will be also available in one of the Students Hostels of the Technical University of Moldova and some other universities in Chişinău. Please mention in the Registration Form that will be sent to you after the acceptance of the abstract (see the section „Registration” above) if you want lodging in the Students Hostel.

Weather

In September weather is usually nice in Chişinău, with temperatures between 15 and 25 Celsius degrees.

Contact: conferences.caim@yahoo.com (for sending the abstracts and registration),

caim2018@caim.utm.md (for any problems concerning the travel or the accommodation).



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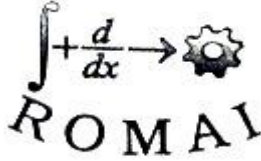
About organizing institutions

1. **ROMAI** was founded in 1992. It is a non-profit scientific association whose members are mathematicians, physicists, engineers, chemists, biologists, economists, and other scientists from Romania, Republic of Moldova, and some other countries. ROMAI encourages and promotes studies on applied mathematics and organizes annually, since 1993, the Conference on Applied and Industrial Mathematics (CAIM). The web page of ROMAI is www.romai.ro.

2. **Technical University of Moldova (TUM)** is the only higher technical educational institution for engineering in the Republic of Moldova. TUM was founded in 1964 with three engineering faculties. Today, the University comprises 9 faculties with a professorial-didactic and engineering teaching staff of over 733 of lecturers, including about 314 lecturers with scientific-pedagogical titles of academics, doctors habilitate, doctors of Sciences, associated and university professors. TUM prepares engineers for the national economy branches, which have great prospects and are developed in accordance with the requirements of modern society: Telecommunications, Energy, Food, Transportation, Light Industry, Machinery Construction, Industrial and Civil Construction, Urbanism and Architecture, Informatics and Microelectronics. TUM has collaboration agreements with about 75 universities in Belgium, Belarus, Bulgaria, Canada, Germany, France, Netherlands, Romania, Sweden, Ukraine, the USA, Spain, Russia, etc. Based on bilateral agreements, TUM students accomplish technological internship in European countries. More information may be found at www.utm.md.

3. **Mathematical Society of the Republic of Moldova** was founded in the 50's, XX century, and since 200 members, most of them have scientific or academic degrees, from all over the country then has been the only association gathering mathematicians of Moldova. At present, it has about and about 40% of its members are women. More than 20 university full Professors, 7 members of Academy of Sciences (Moldova). About 60 associate professors and researches, more than 50 young researches and PhD students. Since 2001 the Mathematical Society of the Republic of Moldova organizes (once in 3 years) national conferences, many national and international scientific events. Since 1965 till 1990, more than 20 All Soviet Union scientific conferences have been organized in: general topology and its applications, algebra, rings and modules, geometry, differential equations, artificial intelligence (2), numerical analysis and mechanics (2) and others. Mathematical community of the Republic of Moldova publishes three international mathematical journals (Buletinul Academiei de Științe a Republicii Moldova. Matematica, Computer Science Journal of Moldova and, in cooperation with polish colleagues, Quasigroups and Related Systems) and a few university mathematical journals. At the same time, the known edition Matematiceskie Issledovanija (127 issues), issued till 1992 by the Institute of Mathematics of the Academy, became visible at international level and at present was digitalized by Center for Retrospective Digitization, Goettingen (GDZ). At present, 66 national Mathematical Olympiads for undergraduate students are organized (each year beginning with 1952), three Balkan Mathematical Olympiads, the Republic of Moldova participates each year at international mathematical Olympiads (beginning with 1993).

4. "**Gh. Mihoc - C. Iacob**" **Institute of Mathematical Statistics and Applied Mathematics** is an



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institute of the Romanian Academy and was founded in 2001 by the unification of two institutes: Center of Mathematical Statistics and "Caius Iacob" Institute of Applied Mathematics. The domains of research are: Probability and Stochastic Processes, Statistical Inference, Operational Research, Dynamical Systems and Control Theory, Fluid Mechanics, Partial Differential Equations and applications in Environmental and Life Sciences. Further information on the activity of this institute may be found at www.ima.ro.

5. The Academy of Romanian Scientists is the continuator of the Academy of Sciences of Romania (1936-1948) and of the Association of Romanian Scientists (founded in 1956), that in 1996 became the Academy of Romanian Scientists. In 2007 it was organized in the actual form. Among the honorific members of the Academy of Sciences of Romania we remind the following winners of Nobel Prize: Louis de Broglie, Jean Perrin, Max Born, Werner-Karl Heisenberg, Paul Sabatier, Friedrich Bergius, Paul Karrer, George Emil Palade. The web page of the Academy of Romanian Scientists is www.aosr.ro/en/.

6. The Tiraspol State University, the first institution of higher education of the Republic of Moldova, was founded on October 1, 1930. The main aim of the University is the support the young specialists and scholars, thus, contributing to the growth of the intellectual elites and to the development of the cultural, social, politic and economic dimensions of the country. The Faculty of Physics, Mathematics and Informational Technologies was founded in 1930, the same year the University had been founded. The Faculty became an important center of training teachers of Physics, Mathematics, Astronomy, Informatics, etc. The scientific seminars of the Faculty Departments were attended by many scholars with an international renown. The Tiraspol State University put the basis of the higher education of our country and greatly contributed to the development of the cultural, social, politic and economic dimensions of the Republic of Moldova. The Academy of Science of Moldova was founded in 1961 and its first President was a graduate of the Tiraspol State University, Academician Iachim Grosul. Tiraspol State University, Institute of Mathematics and Computer Sciences, Moldova State University in collaboration with other institutions have organized a number of scientific conferences: eight Tiraspol Topological Symposiums, two scientific schools on Topological Algebra, one Symposium on Rings and Modules, four Conferences of Mathematical Society of Republic of Moldova, four editions of CAIM, scientific seminars in domains of fundamental mathematics, etc. Tiraspol State University and Institute of Mathematics and Computer Sciences have organized a joint doctoral school in the fields of mathematics and communication sciences. The process of evolution the Tiraspol State University has passed through since its beginning until today has some dramatic aspects, a fact strongly connected to the social and political circumstances that determined the historical fate of the Republic of Moldova. There occurred many events that negatively affected the process of evolution of University: between the years 1937-1938 it was repressed; in the years 1941-1944 the University was evacuated to Orenburg, Russia; from 1945 until 1970 many faculties were transferred to different regions in order to consolidate the higher education institutions; in July 1992, as a result of the military conflict started by the separatist antinational forces, it was evacuated in Chisinau, etc.