

Mathematical Society of the Republic of Moldova

An overview over the state of the mathematical activities in the Republic of Moldova

History

Mathematical Society of the Republic of Moldova (MSRM) was founded in the 50's, XX century, and since then has been the only association gathering mathematicians of Moldova. During these years the Institute of Mathematics of the Academy of Sciences coordinated the most of mathematical activity in the country. Beginning with 1990 the Mathematical Society was more present and after 2001 it became the most representative organization of the Moldovan mathematical community. At present MSRM has 197 members from all over the country, most of them have scientific or academic degrees, 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.

We plan to extend the membership to teachers in mathematics.

Since 1965 till 1990, more than 20 All Soviet Union scientific conferences have been organized in: general topology and its applications (8), algebra (2), rings and modules (2), geometry (2), differential equations (2), artificial intelligence (2), numerical analysis and mechanics (2) and others. During this period, as part of mathematical community of Soviet Union, we were member of IMU. 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). Roughly 70 monographs were published by the editorial houses Shtiintsa (Chisinau) and 10 in Nauka (Moscow), 20 were published or translated in English by most prestigious international publishing houses, <http://www.math.md/en/publications/monographs>.

Favorable events:

1925, Chişinău – the foundation of “Foia Matematica” – a journal for popularization of mathematics, the first intention to consolidate the mathematical community;
1930 – the foundation of the Tiraspol State University;
1933 – the branch of the Agricultural University of Iasi was opened in Chisinau;
1946 – the branch of the Academy of Science of USSR was founded in Moldova;
1961 – the national Academy of Sciences was established in Moldova;
1965 – 1970 -- first councils for doctoral degrees in the areas of theoretical and applied mathematics have been organized in Moldova.

Institutions with activities in mathematics

Universities and Institutions with significant research activities in mathematics:

- ❖ Academy of Sciences of Moldova, Institute of Mathematics & Computer Sciences, <http://www.math.md>
- ❖ State University of Moldova , www.usm.md
- ❖ Tiraspol State University, www.ust.md

Universities in the Republic of Moldova where mathematics is taught:

- "Ion Creanga" Pedagogical State University, www.upsc.md
- Technical University of Moldova, www.utm.md
- Academy of Economic Studies of Moldova, www.ase.md
- State University "A.Russo", Balti, www.usb.md
- Comrat State University, www.kdu.md
- State Agrarian University of Moldova, www.uasm.md
- Academy "Stefan cel Mare" of the Ministry of Internal Affairs, www.academy.police.md
- State University "Bogdan Petriceicu Hasdeu", Cahul, www.usch.md
- University of the Academy of Sciences of Moldova, Chisinau, <http://www.edu.asm.md>

and other private universities (about 10).

Scientific experience in international cooperation

During last 10 years more than 40 international and national projects in mathematics, in particular: 14 - bilateral projects Russia (RFBR) - Moldova; 7 - CRDF-MRDA projects, USA - Moldova; 6 - INTAS projects (2 bilateral); 3 – SCTU grants, 2 - bilateral projects Germany - Moldova; 2 - bilateral projects Romania - Moldova; 1 - bilateral projects Ukraina - Moldova; 1 - bilateral projects Belarus - Moldova; 2 - projects financed by Sweden; 2 - projects financed by Switzerland; 2 – NATO conferences grants; 1- DAAD workshop grant and other.

Mathematicians, known in the world-wide mathematical community

A. Founders of Mathematical Research and Schools:

1. Vladimir A. Andrunachievici
2. Israel Gohberg (from 1973 lived in Israel)
3. Valentin D. Belousov
3. Constantin S. Sibirschi
4. Alexandr M. Zamorzaev
5. Alexandr V. Kuznetsov

B. Active mathematicians at present: P. Soltan, Iu. Reabuhin, M. Choban, V. Arnautov, V. Soltan (now in USA), N. Vulpe, D. Lozovann, V. Voloshin (now in USA), D. Cheban, V. Chepoi (now in France), N. Zhitarashu, V. S. Makarov (now in Russia), M. Ratsa, Gh. Mishcoi, C. Gaidric, G. Belevscaya, A. F. Palistrant, V. Driuma, V. Ufnarovski (now in Sweden), V. Glavan, A. Perjan, S. Cojocar, P. Cojuhari (now in Poland), M. Ursul (now in Romania), M. Popa, A. Colesnic, A. Shuba and many others.

Mathematical Journals

Mathematical community of the Republic of Moldova publishes 3 international journals:

Buletinul Academiei de Ştiinţe a Republicii Moldova. Matematica (Cover-to-cover reviewing in Zentralblatt MATH, MathSciNet (MR), Ref. Zh. Matematika): <http://www.math.md/en/publications/basm>

<http://www.mathnet.ru/eng/basm>

Quasigroups and Related Systems (in cooperation with polish colleagues) (Cover-to-cover reviewing in Zentralblatt MATH, MathSciNet (MR). Ref.Zh.Matematika):

<http://www.quasigroups.eu>

Computer Science Journal of Moldova (reviewing in Zentralblatt MATH, MR, Ref.Zh.Mat.): <http://www.math.md/en/publications/csjm>

Some university mathematical journals are published as well.

About 200 publications appears each year, including monographs, articles in journals and conference proceedings.

Monographs at prestigious publishing houses (selected):

- ❑ Lozovanu, Dmitrii, Pickl, Stefan; Optimization and Multiobjective Control of Time-Discrete Systems, Dynamic Networks and Multilayered Structures, 2009, XVI, 285 p. 53 illus., Hardcover, ISBN: 978-3-540-85024-3
- ❑ [Cheban, David N.](#) Global attractors of non-autonomous dissipative dynamical systems. [Interdisciplinary Mathematical Sciences, 1.](#) World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ, 2004. xxiv+502 pp. ISBN: 981-256-028-9;
- ❑ [Eidelman, Samuil D.](#); [Zhitarsku, Nicolae V.](#) Parabolic boundary value problems. Translated from the Russian original by Gennady Pasechnik and Andrei Iacob. [Operator Theory: Advances and Applications, 101.](#) Birkhäuser Verlag, Basel, 1998. xii+298 pp. ISBN: 3-7643-2972-6;
- ❑ Boltyanski, Vladimir; Martini, Horst; Soltan, Petru S. Excursions into combinatorial geometry. Universitext. Springer-Verlag, Berlin, 1997. xiv+418 pp.
- ❑ [Arnautov V.I.](#), Glavatsky S.T, Mikhalev A.V., Introduction to the theory of topological rings and modules. New York-Basel-Hong Kong: Marcel Dekker, Inc., 1995, 502 pp.
- ❑ Lozovanu D. Multiobjective Control of Time-Discrete Systems and Dynamic games on Networks. Chapter in the Book "Pareto Optimality, Game Theory and Equilibria" (edited by A. Chinchulin, A. Migdalis, P.Pardalis, L Pittsoulis), Springer, 2008, 665-758.

Proceedings (selected):

- ❑ Machines, Computations and Universality. M. Margenstern, Yu. Rogozhin (Editors). Lecture Notes in Computer Science, Springer, vol. 2055, Third International Conference, MCU 2001 Chişinău, Moldavia, May 23-27, 2001, Proceedings, 320 p.
- ❑ Computational Commutative and Non-Commutative Algebraic Geometry. S. Cojocaru, G. Pfister, V. Ufnarovsky (Editors). NATO Science Series. Series III: Computer and Systems Sciences – Vol. 196, IOS Press, 2005, 325 p.
- ❑ Computer Algebra in Scientific Computing, 9th International Workshop, CASC 2006, Victor G. Ganzha, Ernst W. Mayr, Evgenii V. Vorozhtsov (Eds.): Lecture Notes in Computer Science 4194, Chisinau, Moldova, September 11-15, 2006, Proceedings. ISBN 3-540-45182-X

International Conferences:

- the XIV-th Conference on Applied and Industrial Mathematics, dedicated to the 60-th anniversary of the foundation of the Faculty of Mathematics and Computer Science of Moldova State University. Satellite of ICM-2006, Chişinău, August 17-19, 2006, <http://usm.md/math/CAIM/>.
- “Algebraic Systems and their Applications in Differential Equations and other Domains of Mathematics” (ASADE), dedicated to the memory of Acad. Vladimir Andrunachievici (1917-1997) and Acad. Constantin Sibirschi (1927-1990), August 21-23, 2007, Chişinău.
- The Second Conference of the Mathematical Society of the Republic of Moldova dedicated to the 40 anniversary of the foundation of the Institute of Mathematics and Computer Science of ASM Moldova (August 17-19, 2004).
- Workshop NATO "Computational commutative and non-commutative algebraic geometry" (June 6-11, 2004, Chisinau).

National conferences:

- Annual sessions of the Seminar „Algebra and Mathematical Logics” dedicated to the memory of Prof. Valentin Belousov (1925-1988).
- “Mathematics & IT: Research and Education (MITRE'2008)”, October 1-4 2008.
- “Mathematics & IT: Research and Education (MITRE'2009)”, October 8-9 2009.
- „Matematice – actual problems and applications”, ASEM, April 8, 2009.
- Conference “Professor P. Osmatescu - 80”, November 19, 2005.
- Conference “Professor V. Ceban - 90”, February 8-9, 2007.

Mathematical seminars

- Permanent seminars are organized in algebra, geometry, differential equations, applied mathematics, computer sciences, functional analysis
- A permanent seminar of MSRM

International, regional and national Mathematical Olympiads

- 51 national Mathematical Olympiads for undergraduate students are organized (each year beginning with 1952)
- three Balkan Mathematical Olympiads (for seniors – 2000 and 2010 <http://www.math.md/bmo2010/> ; for juniors – 2006) have been organized in Chisinau
- RM participates each year at international mathematical Olympiads (beginning with 1993)

Results at international and regional Mathematical Olympiads

	Gold medals	Silver medals	Bronze medals	Mentions
International Mathematical Olympiad (1993-2010)	5	15	34	14
Balkan Mathematical Olympiad (1996-2010), seniors	11	21	37	13

Balkan Mathematical Olympiad (1998-2010), juniors	6	12	42	8
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