

## XXX International scientific conference MATHEMATICAL METHODS IN TECHNICS AND TECHNOLOGIES - MMTT-30

Saint-Petersburg conference 30 May - 2 June 2017.

Minsk conference 10 - 12 October 2017. Saratov SYS

25 – 27 October 2017.

http://mmtt30.sstu.ru

# INFORMATION LETTER

## Location: Minsk, Republic of Belarus

**BSATU:** 

99, Nezavisimosti Ave.

BSTU:

13a, Sverdlova str.

BSU:

4, Nezavisimosti Ave BSUIR:

6 P. Brovki Street,

BNTU: 65 Nezavisimosty Ave

#### **Objective**

- discussion of scientific achievements in a sphere of mathematical methods in technics and technologies and modern directions of mathematical and computer providing of technological and technical systems;
- knowledge sharing and the best practices of using the results of scientific research provided in the conference materials;
- mathematical methods and models in technics and technologies;
- development of cross-disciplinary, interregional and international cooperation;
- support of preparation of a scientific personnel of the top skills, advanced training of the faculty;
- exchange of the best practices in the field of training of highly qualified personnel on computer science;
- acquaintance of graduate students, undergraduates, young scientists with problems and unresolved problems in the field of mathematical modeling of engineering processes and technical objects.

#### Sections

- 1. Qualitative and numerical research methods of differential and integrated equations
- 2. Optimization, automation and optimum control of engineering processes
- 3. Mathematical modeling of engineering and social processes
- Mathematical modeling and optimization in CAD problems, additive technologies, digital production
- Mathematical methods in radio engineering problems, radio electronics and telecommunications, geoinformatics, avionics and astronautics

- 6. Mathematical methods and intellectual systems in robotics and mechatronics
- 7. Mathematical methods of big data processing (BigData)
- 8. Mathematical methods in medicine and biotechnology
- 9. Mathematical methods of ecological safety providing
- 10. Computer support of production and social processes
- 11. Mathematical methods in economy and the humanities
- 12. Information and intellectual technologies in technics and education

#### **SYS-27**

- 1. Intellectualization of the operated technological processes
- 2. Informatization of technical systems and processes

#### Modus operandi

Reports are accepted and reviewed by Program committee, from June 15th until September 15th, 2017. The admission fee for the accepted reports is 1 500 rub in Russian and 5 000 rub in English. For Belarusian authors, the organizational fee is agreed upon with the regional representative -Hvoschinskaua Ludmila Arkaduevna (ludmila.ark@gmail.com). Article amount – no more than 6 p. Authors receive reports in the form of an electronic prototype (title pages of the collection are provided on the website in the point "Collection of a Conference", actually the article is placed in an electronic office of the author). For receiving a CD of volume or paper option of the corresponding volume (all according to the contract with RINTs 12 volumes are issued) the cost of an admission fee increases by 180 rub. Grad students need not pay the organizational fee provided there are no co-authors and they present a color scan of proof of education status or approval from their department. Materials join in the collection of works and are provided to authors only in case of payment of an admission fee.

It is possible to receive a reference from BSATU contact Hvoschinskaya Ludmila Arkadyevna: ludmila.ark@gmail.com, work phone: +3-751-736-981: mob: +7-029-255-74-74.

Rules of execution of texts of reports are posted on the conference website: http://mmtt30.sstu.ru with the corresponding template and an example is also considered by requirements of RINTs.

The reports selected by Program committee can be published in the 13th volume in English. In this case it is necessary to put to an obligatory copy an additional one (in English, arranged according to requirements (see the website), in electronic form and the firm copy), the author's agreement on the publication (IEEE Copyright Form – see the website).

Following the results of a conference the expanded version of the report with the changed name can be published in magazines from the List of HAC (conditions are posted on the website).

For participation in the cultural program provided by the Organizing committee of a conference it is necessary to arrange the corresponding request in an electronic office of the author(s).

Order of materials providing on MMTT-30, SYS-27. The parts of materials are: the text of the report on a conference or SYS; information about authors (first name, middle initial, last name, academic degree and rank, position and place of employment, addresses, phones, Email; number of section for which materials are prepared); the city in which the author will receive printing option of works of a conference (in the questionnaire in case of registration on the website it is necessary to choose the city from the list: { St. Petersburg, Moscow, Minsk, Saratov, the city of the regional representative, by mail (with payment of postage expenses – approximate 150 rubles) }.

#### Possible ways of materials providing.

The author (authors) independently posts materials on the website http://mmtt30.sstu.ru and receives registration confirmation on the website by e-mail (preferable option).

Materials by e-mail are transferred in the RTF or DOC format to one (closest) regional member or the representative of Program committee who posts them on the website http://mmtt30.sstu.ru and receives registration confirmation by e-mail (exclusive

option, by agreement of the author with the regional representative or the Program committee).

### Conference organizers

Ministry of Education and Science of the Russian Federation

Angarsk State Technical Academy
Astrakhan State Technical University
Belgorod State Technological University
Belarusian State Agrarian Technical University
Belarusian State Technological University
Belarusian National Technical University
Belarusian State University

Belarusian State University of Informatics and

Radioelectronics

Don State Technical University

Institute of Hydrodynamics Academy of Sciences of the Czech Republic

Ivanovo State University of Chemistry and Technology

Russian Academy of Sciences Institute of Numerical Mathematics

Institute of Control Sciences of Russian Academy of Sciences

Kazan National Research Technological University Dmitry Mendeleev University of Chemical Technology of Russia

Ryazan State Radioengineering University Penza State Technological Academy Professorial Assembly of Saint-Petersburg, Public Association

Samara State Technical University
Peter the Great Saint-Petersburg Polytechnic
University

St. Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences

Saint-Petersburg State Institute of Technology (Technical University)

State Technical University of Saratov Tambov State Technical University Tver State Technical University Yaroslavl State Technical University

### Organizing committee

GULYAEV Yury

Vasilyevich,

Committee chairman

Academician RAS, scientific
supervisor V.A. Kotelnikov IRE
RAS, doctor, prof.

Deputy chairmen of the Organizing Committee:

ABLAMEYKO Sergey Academician of the National Vladimirovich of Academy Science of Belarus, DSc, prof., Rector of BSU

BATURYA Mihail DSc., prof.
Pavlovich Rector of BSUIR

BOYTOV Igor DSc, prof.
Vitalyevich Rector of BSTU

PLEVE Igor doctor, prof., Rector SSTU, Rudolfovich Committee vice chairman

HRUSTALEV Boris Academician, Nat'l Academy of Mihailovich Sciences of Belarus

Ph.D., prof. Rector of BNTU
SHILO Ivan Ph.D., prof.

Nikolayevich Rector of BSATU

SHEVCHIK Andrey doctor, prof., Rector SPbSIT(TU),
Pavlovich Committee vice chairman

#### Deputy chairmen of the Organizing Committee:

KOHLERT Cristian
Prof.Dr., Group Direktor Special
Proects ,Klockner Pentaplast
Europe, Germany
Dr.-Ing., Head of IT &
Automation, Mondi Gronau
GmbH, Germany

REINIG Gunter
Prof., Dr., Ruhr University
Bochum, Germany
RESHETILOVSKY
Prof., Dr., Technical University of
Vladimir
Dresden, Germany

dimir Dresden, Germany

**SEAMUS J. Martin** 

Aleksandrovich

**DIAKONOV Herman** 

Vladimir Sergevevich

**KARPENKO Anatoly** 

Mikhail Nikolaevich

LOMOV Alexander

**MESHALKIN Valery** 

**BYKOV Dmitry** 

**GUROV Victor** 

Evgenvevich

Sergevevich

Sergevevich

**Pavlovich** 

ZABOROVSKY

KRASNYANSKY

Anatolyevich

Ilvich

Pavlovich

**NEVALENNY** 

LYSAK Vladimir

Verwina

Georgiy

Medical Genetics at Trinity
College in Dublin, Ireland
VLASÁK Pavel
Dr., Institute of Hydrodynamics

AS CR, Czech Republic
Ph.D. Asssoc. Primary vice-

Prof. of the Department of

rector, BNTU

doctor, prof., Rector SSTU

doctor, prof., Rector RSREU

doctor, prof., Rector KNRTU

doctor, prof., department chairman, Institute Director SPbPU

doctor, prof., department chairman BMSTU doctor, prof., Rector TSTU

doctor, prof., Rector YSTU

Academician RAS, doctor, prof., Rector VSTU Academician RAS, doctor, prof., Institute Director DMU doctor, prof., Rector ASTU Alexander Nikolaevich **NOVIKOV Dmitry** Aleksandrovich PAVLOVSKY Vladimir Evgenyevich REZCHIKOV **Alexander Fedorovich RONZHIN Andrev** Leonidovich TVARDOVSKY **Andrey Viktorovich TYRTYSHNIKOV Evgeny Evgenyevich** FILIMONOV Nikolay Borisovich

CHISTYAKOVA Tamara Balabekovna

SHARNIN Valentin Arkadyevich SHESTOPALOV Mikhail Yuryevich YUSUPBEKOV Alibek Nadyrbekovich associate member RAS, doctor, prof. Director ICS RAS h.r.a., doctor, prof. Keldysh IAM RAS associate member RAS, doctor, prof., President IPPMC RAS doctor, prof., vice director SPIIRAS doctor, prof., Rector TvSTU

Academician RAS, doctor, prof., Director INM RAS doctor, prof., magazine head editor «Mechatronics, automation, control» doctor, prof., department chairperson SPSIT(TU), SPbPA chairperson doctor, prof., Rector ISUCT

doctor, ass. prof., vice rector ETU

doctor, department chairman TSTU, Tashkent, Uzbekistan

### Program committee

BOLSHAKOV Alexander
Afanasyevich
STEPANOV Mikhail
Fedorovich
ABRAMOV Gennady
Vladimirovich
BALAKIREV Valentin
Sergeyevich
BULDAKOVA Tatyana
Ivanovna

DVORETSKY Dmitry
Stanislavovich
ZIYATDINOV Nadir
Nizamovich
KALABIN Alexander
Leonidovich
KVYATKOVSKAYA Irina
Yurevna
LIVSHITS Mikhail
Yuryevich

NEYDORF Rudolf Anatolyevich

CHISTYAKOVA Tamara Belabekovna doctor, prof. chairman

doctor, prof. SSTU – academic Secretary doctor, prof., VSU

doctor, prof.

doctor, prof., BMSTU, academic Secretary FEMA CS doctor, prof. TSTU

doctor, prof., Dean KNRTU doctor, prof. TvSTU

doctor, prof., Institute Director ASTU doctor, prof., department chairman SSTU doctor, prof., department chairman

DSTU
doctor, prof.,
department
chairperson SPSIT(TU)

# Regional members or representatives of Program committee of the Conference and SYS

**Angarsk** Balchugov Alexey Valeryevich balchug@mail.ru

**Astrakhan** Shcherbatov Ivan Anatolyevich sherbatov2004@mail.ru

**Berezniki** Bekker Vyacheslav Filippovich bekker@bf.pstu.ac.ru

**Blagoveshchensk** Bushmanov Alexander Veniaminovich bush29@mail.ru

**Belgorod** Bazhanov Alexander Geraldovich all exe@mail.ru

**Vladimir** Makarov Ruslan Ilyich makarov.ruslan@gmail.com

**Vladivostok** Torgashev Andrey Yuryevich torgashov@iasp.dvo.ru

**Volgograd** Scherbakov Maxim Vladimirovich maxim.shcherbakov@gmail.com

**Voronezh** Abramov Gennady Vladimirovich agwl@yandex.ru

**Ivanovo** Zhukov Vladimir Pavlovich zukovhome@yandex.ru

Lipin Ālexander Gennadevich piaxt@isuct.ru **Irkutsk** Aslamova Vera Sergeyevna

aslamovav@yandex.ru

**Kamyshin** Stepanchenko Ilya Viktorovich stilvi@mail.ru

**Kazan** Ziyatdinov Nadir Nizamovich nnziat@vandex.ru

**Kiev** Beznosik Yury Aleksandrovich vu besnosvk@ukr.net

**Lipetsk** Sarayev Pavel Viktorovich psaraev@yandex.ru

Minsk Hvoshchinskaya Lyudmila Arkadyevna ludmila.ark@gmail.com Moscow Zubov Dmitry Vladimirovich

dvzubov@gmail.com Merzlikina Elena Igorevna MerzlikinaYl@mpei.ru

**Novomoskovsk** Lopatin Alexander Gennadevich a\_lopatin@mail.ru

Novocherkassk Fandeev Evgeny Ivanovich eif@inbox.ru

**Perm** Moshev Evgeny Rudolfovich emoshev@uralpb.ru

**Rostov-on-Don** Neydorf Rudolf Anatolyevich ran pro@mail.ru

**Ryazan** Bukhensky Kirill Valentinovich bukhensky.k.v@rsreu.ru

St.-Petersburg Novozhilova Inna Vasilyevna CAD\_dept@technolog.edu.ru
Samara Livshits Mikhail Yuryevich usat@samgtu.ru
Saratov Pylsky Victor Aleksandrovich pva ir@rambler.ru

akulinin-2006@yandex.ru **Tver** Kalabin Alexander Leonidovich akalabin@yandex.ru **Tashkent** Yusupbekov Alibek

**Tambov** Akulinin Evgeny Igorevich

Nadyrbekovich Abekhimprom757@yandex.ru **Tyumen** Shigobayeva Gulnara Nurchilayevna sgn@utmn.ru

**Tula** Govorov Alexander Alekseevich agovor49@tsu.tula.ru

Chernogolovka Babak Vladyslav Nikolaevich tabor47@mail.ru Yaroslavl Balunov Alexander Ivanovich

balunov@mail.ru