

biomembranes'18

@MIPT - OCTOBER 1st - 5th

RESULTS OF THE INTERNATIONAL CONFERENCE “BIOMEMBRANES 2018”

Moscow Institute of Physics and Technology (MIPT)

Russia, Dolgoprudny, October 1st - 5th, 2018

A. Rogachev



**Joint Institute for Nuclear
Research**

SCIENCE BRINGING NATIONS TOGETHER



<https://biomembranes2018.ru>

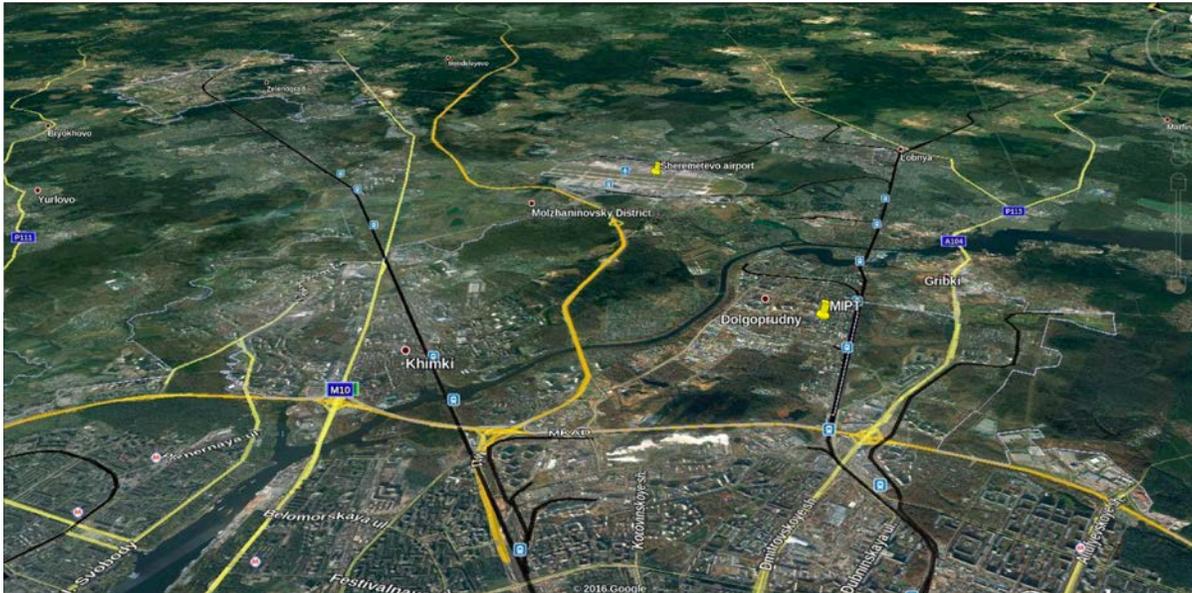
info@biomembranes2018.ru

Locations

Moscow Institute of Physics and Technology

Dolgoprudny, Russia

1 – 5 November 2018



ORGANIZED BY

Moscow Institute of Physics and Technology (Russia)

Joint Institute for Nuclear Research (Russia)

Forschungszentrum Jülich (Germany)

iHuman Institute at ShanghaiTech University (China)

Bridge Institute at University of Southern California (USA)

LOCAL ORGANIZING COMMITTEE

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VALENTIN BORSHCHEVSKIY (MIPT) – Chairman

TATIANA MURUGOVA (JINR / MIPT) – Scientific secretary

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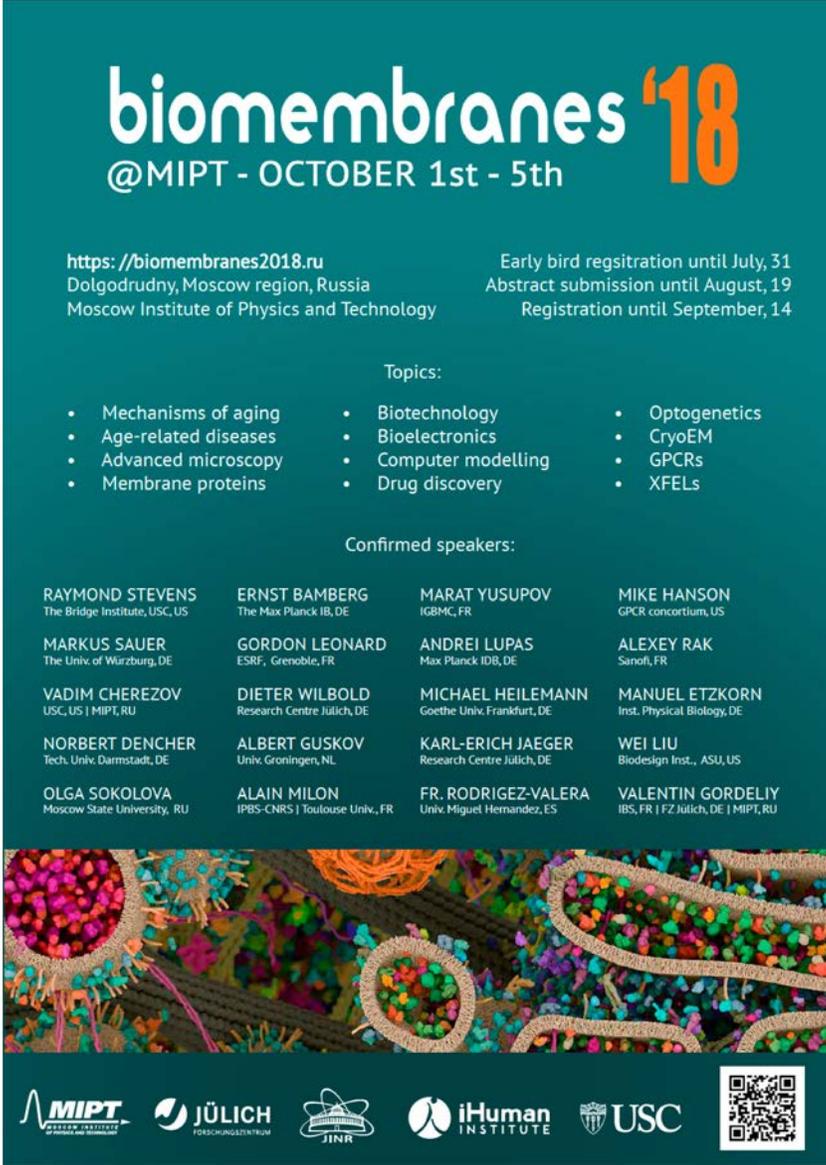
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<https://biomembranes2018.ru>
Dolgoprudny, Moscow region, Russia
Moscow Institute of Physics and Technology

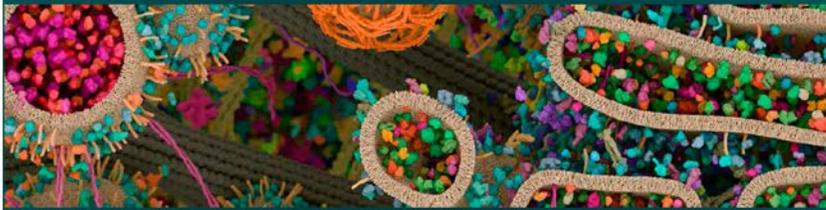
Early bird registration until July, 31
Abstract submission until August, 19
Registration until September, 14

Topics:

- Mechanisms of aging
- Age-related diseases
- Advanced microscopy
- Membrane proteins
- Biotechnology
- Bioelectronics
- Computer modelling
- Drug discovery
- Optogenetics
- CryoEM
- GPCRs
- XFELs

Confirmed speakers:

RAYMOND STEVENS The Bridge Institute, USC, US	ERNST BAMBERG The Max Planck IB, DE	MARAT YUSUPOV IGBMC, FR	MIKE HANSON GPCR consortium, US
MARKUS SAUER The Univ. of Würzburg, DE	GORDON LEONARD ESRF, Grenoble, FR	ANDREI LUPAS Max Planck IB, DE	ALEXEY RAK Sanofi, FR
VADIM CHEREZOV USC, US MIPT, RU	DIETER WILBOLD Research Centre Jülich, DE	MICHAEL HEILEMANN Goethe Univ. Frankfurt, DE	MANUEL ETZKORN Inst. Physical Biology, DE
NORBERT DENCHER Tech. Univ. Darmstadt, DE	ALBERT GUSKOV Univ. Groningen, NL	KARL-ERICH JAEGER Research Centre Jülich, DE	WEI LIU Biodesign Inst., ASU, US
OLGA SOKOLOVA Moscow State University, RU	ALAIN MILON IPBS-CNRS Toulouse Univ., FR	FR. RODRIGEZ-VALERA Univ. Miguel Hernandez, ES	VALENTIN GORDELIY IBS, FR FZ Jülich, DE MIPT, RU



MIPT | JÜLICH | JINR | iHuman INSTITUTE | USC



PROGRAM COMMITTEE

VALENTIN GORDELIY – Chairman (IBS, France / FZJ / Germany)

ERNST BAMBERG – Co-Chairman (MPI for Biophysics, Germany)

VADIM CHEREZOV (Bridge Institute, USC, USA / MIPT, Russia)

VLADIMIR ANISIMOV (Petrov Research Institute of Oncology, Russia)

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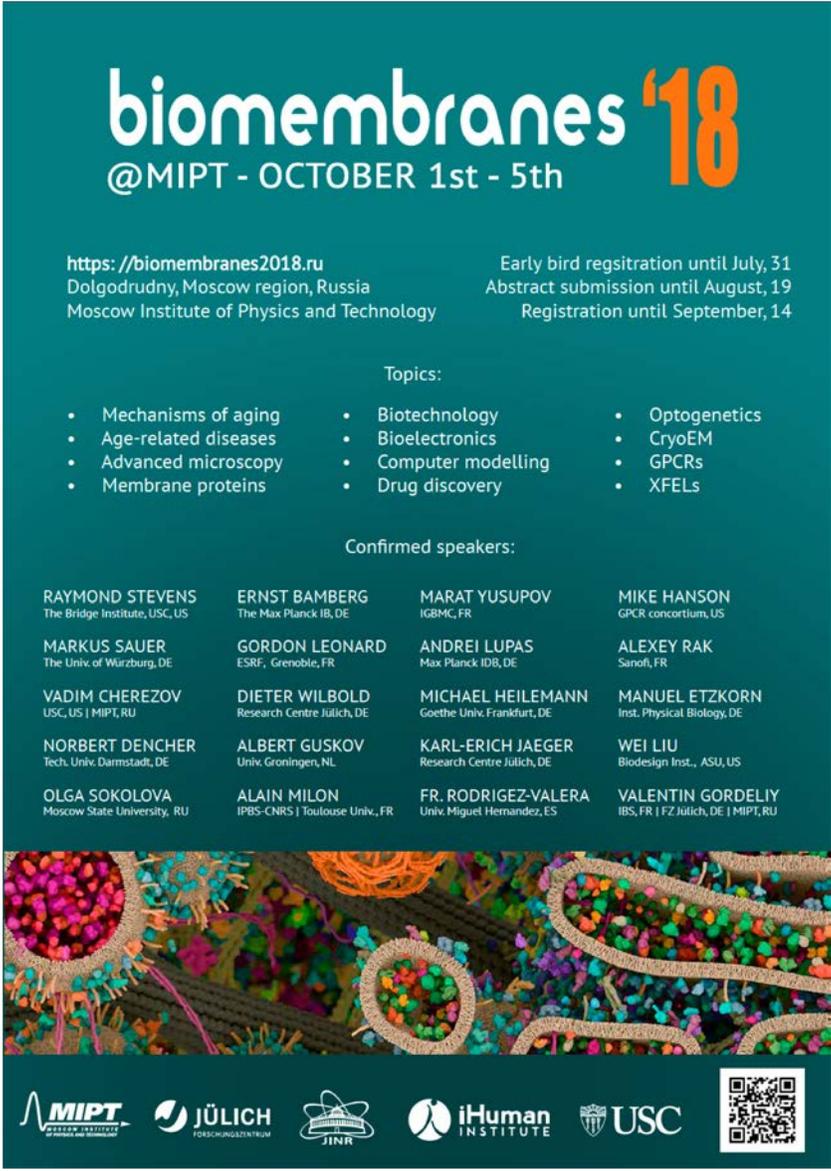
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The poster for the Biomembranes '18 conference features a teal background with white and orange text. At the top, the title 'biomembranes '18' is displayed in a large, bold font, with '@MIPT - OCTOBER 1st - 5th' below it. The website URL 'https://biomembranes2018.ru' and location 'Dolgoprudny, Moscow region, Russia' are provided. Registration and abstract submission deadlines are listed. A list of topics and confirmed speakers is presented in a grid format. The bottom of the poster includes logos for MIPT, Jülich, JINR, iHuman Institute, and USC, along with a QR code.

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Moscow Institute of Physics and Technology

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MIPT MOSCOW INSTITUTE OF PHYSICS AND TECHNOLOGY

JÜLICH FÖRSCHUNGSANSTALT JÜLICH

JINR

iHuman INSTITUTE

USC



ORGANIZERS

SPEAKERS

PARTICIPANTS

GEOGRAPHY

2018

<https://biomembranes2018.ru>



74

520

**MORE THAN
15**

COUNTRIES

RUSSIA, GERMANY, FRANCE,
USA, UK, JAPAN, CHINA, ITALY,
SPAIN, SWEDEN, BELGIUM,
NEDERLANDS ET AL.

2016

<https://biomembranes2016.ru>



40

360

**MORE THAN
10
COUNTRIES**

2014

<http://biomembranes2014.ru>



28

240

**5
COUNTRIES**
RUSSIA, GERMANY, FRANCE,
USA, UK

2010



18

60

**3
COUNTRIES**
RUSSIA, GERMANY, FRANCE

Topics

74 oral presentation and more than 220 poster presentation

- Integrative structural biology of membrane proteins
- Modern methods of investigation of membranes and membrane proteins
- Modern ideas about the molecular mechanisms of aging and the development of age-related diseases
- Drug development
- Bioinformatics and computer modeling of biological systems. Theoretical biophysics
- G-protein coupled receptors (GPCR)
- Studies of two-component signaling systems

Participants

The number of in-person conference participants was more than 520

More than 200 posters have been presented on the conference

The geography of the participants is more than 15 countries including Russia, Germany, USA, China, France, United Kingdom, Belorussia, Brazil, Netherlands, Spain, Sweden, Italy and others

Participants

Московский физико-технический институт (Долгопрудный),
Московский государственный университет им. Ломоносова,
Институт биоорганической химии им. академиков М.М. Шемякина
и Ю.А. Овчинникова РАН (Москва),
Институт проблем передачи информации имени А. А. Харкевича
РАН (Москва),
Институт белка РАН (Пущино),
Дальневосточный федеральный университет (Владивосток),
Институт трансляционной Биомедицины (СПбГУ, С.-Петербург),
Forschungszentrum Jülich (Germany),
Bridge Institute (University of Southern California, USA),
iHuman Institute (ShanghaiTech University, China),
Institute of Pharmacology and Structural Biology (France),
European XFEL Facility (Germany),
University of Groningen (The Netherlands),
Helmholtz Center for Materials and Energy (Germany),

Merck KGaA (Germany),
Miguel Hernández University of Elche (Spain),
Max Planck Institute of Molecular Physiology (Germany),
Institute of bioorganic chemistry NASB (Belarus),
Center for Regenerative Therapies (Germany),
European Molecular Biology Laboratory (Hamburg, Germany),
European Synchrotron Radiation Facility (France),
Biodesign Institute (Arizona State University, USA),
UCL Institute of Neurology (United Kingdom),
International Institute of Physics (Brazil),
Cedilla Therapeutics (USA)
et al. ...

biomembranes'18.*live*

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miR-182 and miR-183 maintain cone outer segments *in vivo*

Group	OPN1SW:RFP fold (arbitrary)
sh-Control	~1000
sh-miR-183/182	~8000

sh-Control sh-miR-183/182

Scale bar, 20µm

LIVE

Biomembranes'18@MIPT. RAYMOND STEVENS, VOLKER BUSSKAMP, KONSTANTIN LUKYANOV

1140 смотрят сейчас

51 | Поделиться | + Добавить к себе | Ещё ▾

МФТИ — Физтех ✓
сегодня в 10:55

+ Подписаться

<https://biomembranes2018.ru/live.html>

Proceedings

- About 300 participants who gave lectures and presented posters, published their theses in proceedings of the conference book.
- Also proceedings of the conference will be published as a part of a regular issue of the Journal of Bioenergetics and Biomembranes (2017 Impact Factor 2.9).



Journal of Bioenergetics and Biomembranes

Editor-in-Chief: Patric Stanton
ISSN: 0145-479X (print version)
ISSN: 1573-6881 (electronic version)
Journal no. 10863

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Speed	Usage	Impact
 44 No. of days from submission of the manuscript to first decision – 2017	 55,679 No. of downloads – 2017	 2.914 IF 2017
 16 No. of days from acceptance at publisher to published online – 2017	 262 Usage Factor 2016/2017	 0.716 SNIP – 2017 Source Normalized Impact per Paper
	 21,216 LinkOut Statistics – 2017	 1.033 SJR – 2017 SCImago Journal Rank
		 23 h5 Index – 2017
		 100% Overall Author Satisfaction

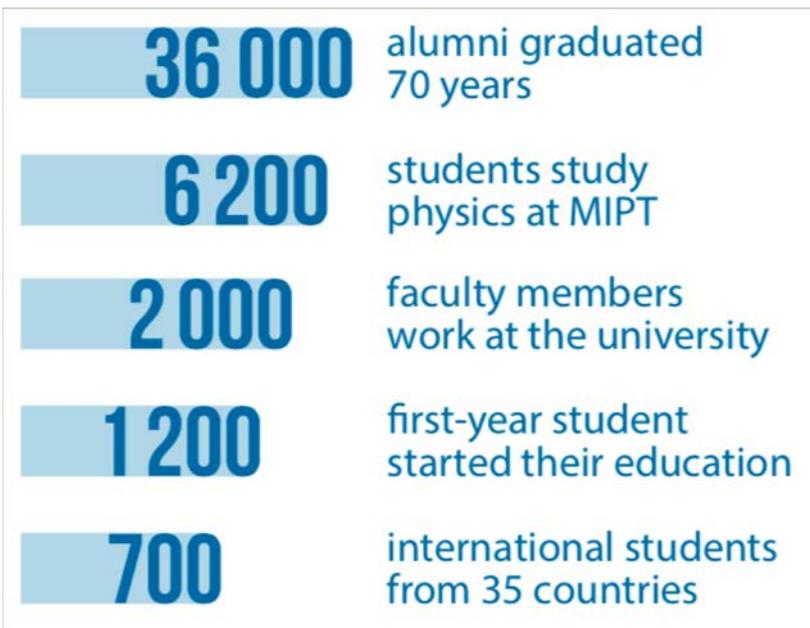
Journal Metrics [Learn more](#)

JINR@Biomembranes'18

- JINR in the framework of exhibition events was presented of recent advances in the field for applications of neutron methods for structural biology problems and infrastructural possibilities of JINR.
- More than 20 speakers from JINR have shown their research results in the format of oral and poster presentations.



Research, competence and facilities



World Subject University Ranking



ARWU Physics
201-300



QS Natural Science
106

QS Physics & Astronomy
51-100

QS Mathematics
151-200



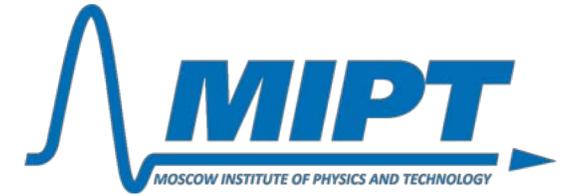
THE Physical Sciences
48

THE Computer science
67

KEY FACTS:

- **Founded in 1951**
- **10 Nobel Prize winners** among professors and alumni
- **Over 50 featured science labs**
- Regular **top 3** in Russian university rankings
- Regular **top 10** in the ranking of universities QS Emerging Europe and Central Asia
- **MIPT has created** several **online courses** on different online education platforms (Coursera, iTunes University, Open Course Ware, Mipt Lecture)

Research, competence and facilities



Infrastructure for structural biophysics research at MIPT:

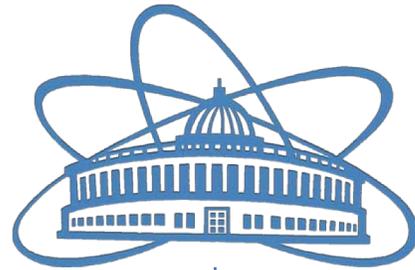
- High-throughput protein crystallization platform
- Protein crystallography and X-ray scattering
- Cryo-electron microscopy platform (new)
- Modern super-resolution microscopy
- Optogenetics, patch-clamp and flash photolysis studies
- Platform for protein expression and purification
- Membrane protein functional assays



MIPT for JINR

We make a full cycle of research using modern equipment

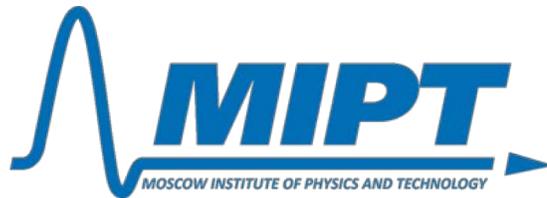
JINR-MIPT JOINT RESEARCH PROJECTS



- SANS spectrometer
- Biocemical Lab. (included advanced analytical and preparative equipment)
- and more...

- SAXS-WAX spectrometer
- Nanoscope - equipment for ultra-high resolution microscopy with the PALM-SIM microscopy
- DLS
- Chromatography and analytical systems
- Cryo-EM
- ...

RUSSIAN



LOMONOSOV MOSCOW
STATE UNIVERSITY



Joint Institute for Nuclear
Research

SCIENCE BRINGING NATIONS TOGETHER

International School

MODERN CRYO-ELECTRON MICROSCOPY

30th May - 1st June 2019, Dolgoprudny, Russia

[REGISTER NOW](#)

Prior to the event left:

127
Days

03
Hours

57
Minutes

41
Seconds

Committee proposals

- Recognize successful experience of interaction with MIPT in international schools and conferences
- Recognize that participating in these events is making the right image of JINR in the international scientific community
- More actively support joint projects of JINR and MIPT in future for maximum use of human resources of MIPT and development joint research infrastructure
- Supported further work for the organization of joint events, include conferences, schools and workshops