



Fourteenth International
Conference – School of
Young Scientists

WAVES AND VORTICES IN COMPLEX MEDIA

Moscow

28 November – 01 December 2023

Conference venue is Ishlinsky Institute for
Problems in Mechanics RAS
(IPMech RAS)



Moscow 119526, Vernadskogo prospect, 101/1

ANNOUNCEMENT INVITATION TO PARTICIPATE

Website:

<https://ipmnet.ru/conf/confs/>

Contacts:

Conference secretary

Elena V. Esina

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Phone +7 (495) 434-21-49

INFORMATION FOR PARTICIPANTS

Conference languages: Russian and English.
Participants present electronic version of the:

– **Registration form;**

– **Presentation materials** prepared in MS Word, 12 pt, up to 3 pages framed by 16×24 cm. **TITLE OF THE PRESENTATION, authors' names and addresses** prepared as per sample given at school website.

The program will include invited (30 min) and oral talks: regular (15 min) and informative (3 min + poster at A0). Meeting rooms are equipped with boards, screens, video projectors. As appropriate, it will be in-person (traditional form) and on-line (virtual form) conference.

KEY DATES

Registration form and extended abstracts
before October 01, 2023

Author notification on acceptance

before October 10, 2023

REGISTRATION FEE

For regular participant fee is **2000 rub.** For young scientists (under 35 years) – **500 rub.**

The fee can be paid in cash at the registration desk or by bank transfer order.

Requisites are available on request.

ACCOMMODATION

A wide range of hotels of various comfort levels in the vicinity of the conference venue is available.

SCIENTIFIC PROGRAM

- **Systems of fundamental equations and constitutive models of complex media flows;**
- **Methods of mathematical simulation and laboratory modeling of flows;**
- **Waves, vortices, coherent structures, turbulence and ligaments in fluid and gas flows;**
- **Mechanics of simple and complex liquids with phase transitions, gas- fluid systems and suspensions, including flows in external electric or magnetic fields and extreme conditions of low and high temperature;**
- **Technique of modern experiment;**
- **Engineering and technological applications.**



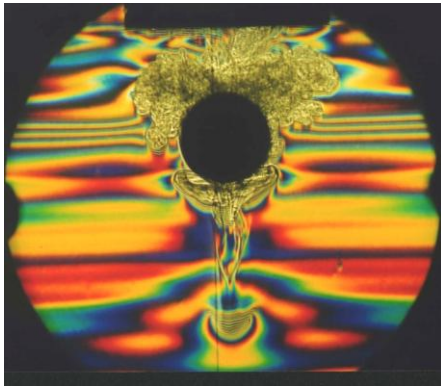
Drop impact flow components: splash with ejected drop, cavity and crown remnants, ligaments (loops), capillary waves

REGISTRATION

Registration will take place in IPMech RAS (room 253) starting from 28 November 2023

INTERNATIONAL PROGRAM COMMITTEE

Acad. RAS A.G. Kulikovskiy (honorary chair), Prof. Yu.D. Chashechkin (co-chair), Corr.m. RAS S.E. Yakush (co-chair), Corr.m. RAS D.A. Gubaidullin (deputy chair), Prof. S.F. Urmacheev (deputy chair), E.V. Esina (sci. secr.), Dr. V.G. Baydulov, Prof. T. Bodnar (Czech), Dr. O.G. Chkhetiani, Dr. E.V. Ermanyuk, Prof. P. Fraunie (Fra), Prof. Ya. Fukumoto (Jap), Corr.m. RAS A.M. Gaifullin, Prof. A. Herczynski (USA), Acad. D.M. Klimov, Prof. A.A. Kosinov, Prof. A.N. Osipov, Prof. R.M. Vilfand, Dr. A.G. Zatsepin



Side schlieren photo of the sphere free oscillations on the horizon of neutral buoyancy

The conference school program includes invited and oral presentations (regular and informative). Materials of accepted talks will be published in the Conference Proceedings Volume. Selected papers will be recommended for publication in Journals "Fluid Dynamics", "Applied Mathematics and Mechanics" and "Axioms".

Contacts

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GENERAL INFORMATION

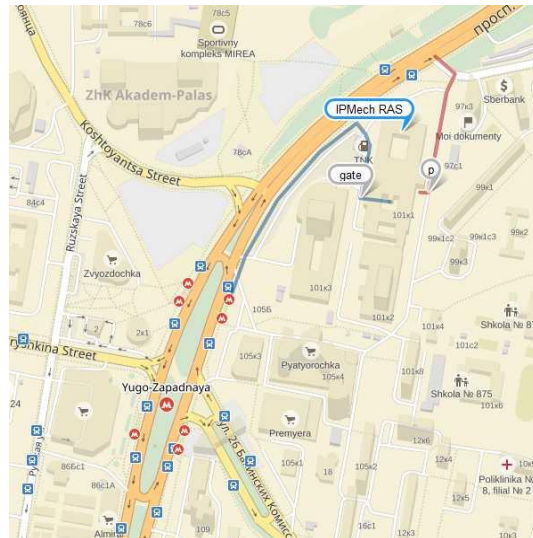
Update technology of contact and remote sensing, development and improvement of mathematics and computing have opened up new opportunities to study the waves and vortices - key components of flows, which play a dominant role in the dynamics of natural and industrial systems, and form the basis of a number of high-performance technologies.

The study of periodic flows tends of interest for mechanics and a number of related disciplines: physics, chemistry, biochemistry, in which transport processes and redistribution of materials are studied. Their investigation is of interest to a number of related disciplines, such as chemistry, biology, pharmacy, which involves the transport processes and the redistribution of the matter.

Physical processes in the investigated media, usually multi-phase, multi-component, and stratified are complicated. Solving the scientific problems will improve the description, specification and development of the forecast of new management trends in natural systems and processes.

HOW TO GET

Metro Station "Yugo-Zapadnaya". Exit from the last subway car, then walk about 10 minutes to IPMech RAS.



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SPONSORS

Russian Academy of Sciences
Ishlinsky Institute for Problems in Mechanics RAS

ORGANIZERS

Ishlinsky Institute for Problems in
Mechanics RAS

Steklov Mathematical Institute of RAS

Upcoming event continues a series of schools on actual problems of theoretical and experimental fluid mechanics in 2010, 2011, 2012, 2013, 2014 Moscow, 2015 in Kaliningrad, 2016, 2017, 2018, 2019, 2020, 2021, 2022 in Moscow

Scholars of all specializations: experimentalists, t mathematicians (both analytic and numeric) are invited to participate.

Lectures will be delivered by experts in the key branches of mechanics and mathematics, as well as young scientists.