

Tenth international conference - school of young scientists

WAVES AND VORTICES IN COMPLEX MEDIA

Moscow 03 – 05 December 2019

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



Moscow 119526,101 (1) prospect Vernadskogo

ANNOUNCEMENT INVITATION TO PARTICIPATE

The conference school program includes invited and oral presentations as well as short communications.

Conference materials will be published.

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 (15 min), communications (3 min + poster at A0). Meeting rooms are equipped with boards, screens, video projectors.

It is planned to publish a collection of conferenceschool materials and texts of selected reports for publication in the thematic issues of the journals "Izvestiya RAS. Fluid dynamics" and "Disaster Advances".

Conference information package will be distributed at the registration.

KEY DATES

Registration form and presentation materials **before October 01, 2019**Author notification on acceptance

before October 20, 2019

REGISTRATION FEE

Regular participant fee is 1500 rub. For young scientists (before 35 years old) – 500 rub. The fee can be paid in cash at the registration desk or by bank transfer order. Reguisites are available on request.

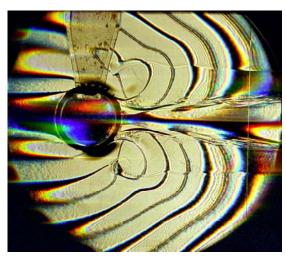
ACCOMMODATION

Participants accommodate in hotels on their own booking (trivago.ru or booking.com).

SCIENTIFIC PROGRAM

- Fundamental equations and constitutive models of flows of complex media;
- Methods of mathematical simulation and laboratory modeling of flows of complex media;
- Ligaments, waves, vortices, coherent structures and turbulence;
- Mechanics of simple and complex liquids with sludge, ice, foam, bubbles, phase transitions, as well as gas-liquid systems and suspensions, including external electric and magnetic fields;
- Technique of modern experiment;
 Technical and technological applications.

Papers on close topics can be included in the school. Number of papers presented by one author is not limited.



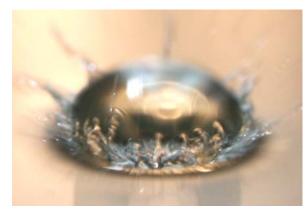
Shadow pattern of the flow around the cylinder: ligaments, internal waves and vortices

REGISTRATION

Registration will lake place in the IPMech RAS (room 253) starting from 03 December 2019

INTERNATIONAL PROGRAM COMMITTEE

Acad. RAS A.G. Kulikovsky (honorary chair), Dr. V.G. Baydulov— sci. secr., Prof. T. Bodnar (Czech), Prof. Yu.D. Chashechkin - chair, Dr. O.G. Chkhetiany, Prof. H. Choi (Korea), Dr. E.V. Ermanyuk, Prof. P. Fraunie (Fra), Prof. Ya. Fukumoto (Jap), Corr.m. RAS D.A. Gubaidullin (deputy chair), Prof. A. Herczynski (USA), Prof. A.I. Grigoriev, Prof. A.N. Osiptsov, Prof. G.P.R. Sekhar (India), Prof. S.F. Urmacheev (deputy chair), Prof. M.G. Shatrov, Prof. R.M. Vilfand, Dr. S.E. Yakush. Dr. A.G. Zatsepin,



Traces of droplets on the surface of the submerging in fluid drop.

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". The exit from the last subway car. Then walk about 10 minutes to IPMech RAS.



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SPONSORS

Russia Foundation for Basic Research Russian Academy of Sciences

Organizers

Ishlinsky Institute for Problems in Mechanics of the 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 in Moscow

To participate in the school are invited scholars of all specializations: experimentalists, theoreticians (both analytic and numeric) and mathematicians. Lectures are delivered by well-known experts in the key branches of mechanics and mathematics, as well as young scientists.