

**IUTAM SYMPOSIUM 12-3 = GA.10-08**

**WAVES IN FLUIDS:  
EFFECTS OF NON-LINEARITY,  
ROTATION, STRATIFICATION  
AND DISSIPATION**



**Moscow  
June 18 – 22, 2012**

Symposium Venue:

Institute for Problems in Mechanics of the RAS  
(IPMech RAS)



101/1, prospect Vernadskogo, Moscow, 119526

**CALL FOR PAPERS**

The IUTAM Symposium programme will include invited plenary lectures and oral presentations

Detailed information at <http://www.ipmnet.ru/>

**CALL FOR PAPERS**

The language of the IUTAM Symposium is English. Abstract template and registration form at <http://www.ipmnet.ru/>

A book of abstracts will be distributed at the symposium registration desk.

The Programme will contain general lectures (40 min, including questions) and contributed talks (20 min). The "smart" lecture rooms will be Internet capable and equipped with blackboards, overhead, NTSC VCR and PC video projection.

**KEY DATES**

Submission of applications and abstracts

~~March 15, 2012~~ **April 1, 2012**

Notification to authors

**April 15, 2012**

**REGISTRATION &  
HOUSING INFORMATION**

Regular participant fee is 250 USD. Includes all registration materials, participation, coffee breaks, *ice-break* reception. Student Symposium fee is 150 USD.

**ACCOMMODATION** of participants will be at the hotels of the RAS and municipal hotels according to personal request.

**SYMPOSIUM SPONSORS**

International Union for Theoretical and Applied Mechanics (IUTAM);

The Ministry of Education and Science of the Russian Federation;

The Russian Academy of Sciences;

Russian Foundation for Basic Research

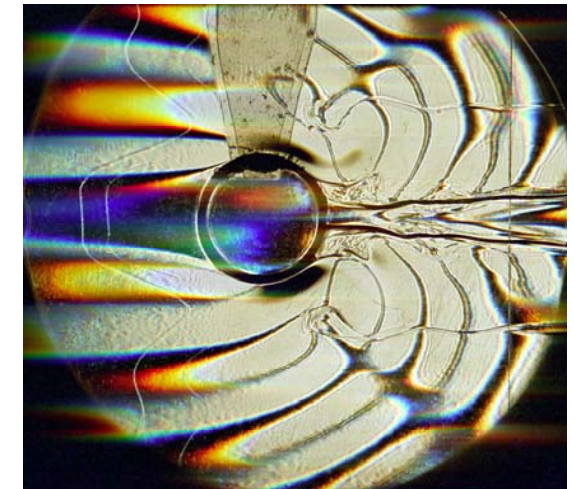
**SCIENTIFIC COMMITTEE**

Professor K. Bajer (PL),  
Professor Yu.D. Chashechkin (RU) – chairman

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Professor L. Shemer (IL),  
Professor C. Staquet (FR).

**Representative of IUTAM:**

Professor F.L. Chernousko (RU)



Internal waves and soaring interfaces in stratified flow past cylinder

**LOCAL ORGANISING  
COMMITTEE**

Dr. Vasilij G. Baydulov,  
Dr. Tatiana.O. Chaplina – scientific secretary,  
Prof. Yuli D. Chashechkin – chair,  
Dr. Evgeniya .V. Stepanova  
Dr. Roman N. Bardakov (all: IPMech RAS)

## SCIENTIFIC PROGRAM:

- Linear and non-linear models of waves: rotation, stratification and dissipation effects;
- waves in deep, intermediate depth and shallow water;
- Fine structure, stability and instabilities of waves;
- Interaction of waves of the same and different nature (inertial, gravity surface and internal, capillary, acoustic);
- Forcing action of waves on obstacles;
- Wave transport of substances and energy;
- Measurements and remote sensing of wave fields in the environment and the laboratory.

Papers on other topics are equally welcome and will be included in the program of the Symposium. More than one abstract may be submitted.

## The Symposium is organised by

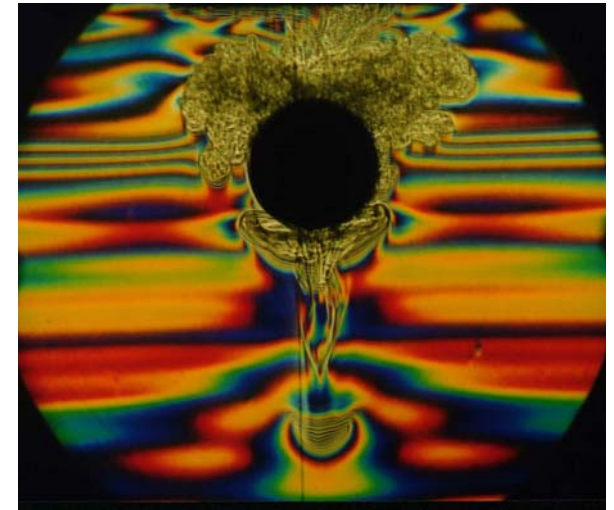
The Institute for Problems in Mechanics of the RAS.

## SYMPOSIUM CONTACTS

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## GENERAL INFORMATION

Moscow being the capital of the Russian Federation, is a renovated marvellous city of long historical traditions, of a rich culture and a great number of the world recognised theatres (the Bolshoy is among them), of Concert halls, Museums, parks, historical monuments. Moscow is one of the world biggest airway and railway transport hub directly linked with many capitals and towns. The Symposium is organised by the Institute for Problems in Mechanics of the RAS (IPM RAS) founded in 1964. Research Scientists of IPM RAS are working in different fields of solid, fluid, gas and plasma mechanics. The Institute is equipped by modern facilities and computer centre. Studying of fluid flows, waves and vortices in homogeneous quiet, rotating and stratified fluids is among the main direction of scientific activities. The Institute successfully organised series of national and international conferences on turbulence, fluid mechanics and environmental flows. Program of the symposium will include visits to scientific laboratories such as unique Stratified Flow Laboratory of the Institute for Problems in Mechanics of the RAS where varieties of optic, acoustic and probe methods are employed to use simultaneously. Optional Pre and Past symposium Tours will give a chance to foreign guests to visit different historic towns like St-Petersburg, Novgorod the Great, Pskov, Nizhniy Novgorod, Yaroslavl and the greatest fresh water lakes: Baykal, Ladoga and Onega (according to personal request).



Autocumulative jet and internal waves generated in a stratified fluid by a free oscillating sphere on a horizon of neutral buoyancy

## TRAVEL

Metro station "Yugo-Zapadnaya" (the last car from the center), then 5 minutes around the Gazprom skyscraper

