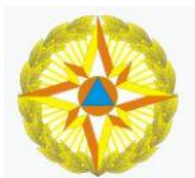


## The Joint Workshop

### “IPM: EMERGENCY NATURAL PHENOMENONS AND THEIR SCIENTIFIC DESCRIPTION”

(IPM2025)



Academy of the Ministry of Emergency Situations  
of the Republic of Azerbaijan

and



**İSAAC GROUP ACADEMY**

**(innovations in science, art, architecture and culture)**

04 September 2025.

- Baku,
- Azerbaijan

Academy of the Ministry of Emergency Situations of the Republic of Azerbaijan and İSAAC GROUP ACADEMY (Baku, Azerbaijan) are organizing the Joint First Workshop “**IPM: EMERGENCY NATURAL PHENOMENONS AND THEIR SCIENTIFIC DESCRIPTION**” (IPM2025) (September 04, 2025) in the series "Investigations in Physics and Mathematics (IPM)"

The purpose of this seminar is to scientifically discuss some phenomena in nature and everyday life based on the fundamental principles of physics and mathematics.

To this end the workshop will consist of **invited talks only**.



### **Topics to be discussed:**

- Factors of Caspian Sea level change
- Problems of local regulation of precipitation in the territory of the Republic of Azerbaijan
- Natural calamities in the South Caucasus: torrents, earthquakes. Historical chronology and scientific basis
- LIDARs and their Civil and Military Applications
- Radiation Materials Science
- Radiation monitoring in the Republic of Azerbaijan
- Alternative energy sources
- Controlled thermonuclear fusion as an alternative energy source
- Plasmoid, Ball Lightning as an alternative energy source
- Green Energy
- Prospects for the use of wind energy in the territory of the Republic of Azerbaijan
- Solar cells
- Artificial intelligence
- Optimization and Control
- Mathematical modeling
- Unmanned aerial vehicles
- Problems of modeling, control and stabilization of quadcopter flight
- Regulation of safe and profitable exploitation of electricity, water and natural gas by producers and consumers using game theory
- Econophysics
- Medical physics and occupational diseases
- The problem of boundary states in relativistic nuclear and elementary particle physics
- History and philosophical aspects of education



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Distinguish scientist of University of Sao Paulo, Sao Paulo, Brazil  
and

principal scientist of PN Lebedev Physical Institute Russian Academy of Sciences,  
Moscow, Russian Federation

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**Sohrab Rahvar**

Sharif Technology University, IRI

Dr. Professor

**Tiago Carlos Adorno de Freitas**

Department of Physics, School of Mathematics and Physics Xi'an Jiaotong-Liverpool University (XJTLU)  
Suzhou Industrial Park, Suzhou, China  
Dr. Professor

**Anzor Khelashvili**

principal scientist of Nodar Amaglobeli High Energy Physics Institute of Ivane Muskhelishvili Tbilisi State University  
Correspondent Member of Georgian Academy of Sciences, Tbilisi, Georgia  
Doctor of Physical and Mathematical Sciences, Professor

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Professor

**Maxim Dvornikov**

Head of the Theoretical Physics Department of the Pushkov Institute of the Earth, Atmosphere and Ionosphere (IZMIRAN) of the Russian Academy of Sciences, Moscow, Russian Federation  
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Topchubashov Scientific Surgical Center,  
Chief Physician, PHD

**Shahlar Askerov**

Azerbaijan State University of Economics and Baku State University of the Ministry of Science and Education of the Republic of Azerbaijan  
Doctor of Physical and Mathematical Sciences, Professor

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Doctor of Sciences, professor

**Emin Garibli**

Azerbaijan State University of Economics of the Ministry of Science and Education of the Republic of Azerbaijan  
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Head of Department, Hassan Aliyev Institute of Geography  
Doctor of Geographical Sciences, Professor

**Islam Mustafayev**

Director of the Institute of Radiation Problems of the Ministry of Science and Education of the Republic of Azerbaijan  
Corresponding Member of Azerbaijan National Academy of Sciences,

Doctor of Chemical Sciences, Professor

**Mutallim Mutallimov**

Head of the Mathematical Modeling Department of the Institute of Applied Mathematics of Baku State University of the Ministry of Science and Education of the Republic of Azerbaijan,  
Doctor of Mathematics

**Jahangir Huseynov**

Head of the General Physics Department of Physics Faculty of the Azerbaijan State Pedagogical University  
Doctor of Physics

**Raşit Ahiska**

TES Thermoelectric Systems Energy R&D Production Marketing Distribution Consultancy Education Manufacturing Industry and Trade Limited Company, General Manager, Dr., Professor.



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**Aslan Huseynov** - Deputy chief of the Academy, colonel

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**Yashar Huseynaliyev**

Ministry of Digital Development and Transport of the Republic of Azerbaijan, Innovation and Digital Development Agency, Department of Nucleus Investigations  
Dr. Associate Professor

**Scientific Secretary**

**Leyla Aghamaliyeva**

Azerbaijan University and Baku State University of the Ministry of Science and Education of the Republic of Azerbaijan  
ISAAC GROUP ACADEMY  
PHD. Associate Professor

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Azerbaijan State Medical University of the Ministry of Science and Education of the Republic of Azerbaijan  
PHD. Associate Professor

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ISAAC GROUP ACADEMY and Baku State University

**Amin Gasimov**

ISAAC GROUP ACADEMY and Baku State University

**Kenan Salayev**

ISAAC GROUP ACADEMY and Baku State University



### Structure of the workshop

- Participation will be available both in **person and online**.
- **Speakers by invitation only.**
- Two sessions with 10 invited talks of **25 or 30 minutes** duration and **5 minutes** for questions (*additional time is possible by request*) and debates of a current character after each talk will be arranged every day.
- In the evening one hour will be devoted to moderated open discussion of relevant general problems.
- Poster sessions are envisaged for young participants (graduates and post graduates) as everyday last 40-min sessions.
- **Only registered participants can follow the sessions and take part in the discussions.**
- Proceedings of the workshop will be published.



## IMPORTANT DATES

- **August 10, 2025 - end of abstract submission**
- **August 31, 2025 - end of registration of speakers**
- **September 04, 2025 - start of the Workshop**
  
- ***Participation with review talks is by invitation of the Organizing Committee.***
- In the case of a proactive request the decision is made by the Organizing Committee.
- The sessions will be **online** by appropriate software and also in person.
- 
- The abstract book of the workshop is printed.

**THERE IS NO REGISTRATION FEE.**

### Contact:

**Contact person:** Faiq F. Safarov  
**Behalf on** prof. Rauf G. Jafarov  
e-mail address: [jpm.isaacgroup@gmail.com](mailto:jpm.isaacgroup@gmail.com) ,  
[r.g.jafarov@hotmail.com](mailto:r.g.jafarov@hotmail.com) ,  
[r.g.jafarov@gmail.com](mailto:r.g.jafarov@gmail.com)  
Mobile: +99455 9876254  
[www.raufjafarov.org.az/Home/IPMWorkshops](http://www.raufjafarov.org.az/Home/IPMWorkshops)

Address: AZ1089, Baku city, Surakhani district, Hovsan settlement, Elman Gasimov str, 8