**[Logunov](http://www.ihep.ru/)**[**Institute for High Energy Physics**](http://www.ihep.ru/)

 (Protvino, Moscow region, Russia)

of  the[**National Research Centre "Kurchatov Institute"**](http://www.nrcki.ru/e/engl.html)

is organizing

the XXXV International Workshop on High Energy Physics

“**From Quarks to Galaxies: Elucidating Dark Sides**”,

November 28-December 1, 2023.

 The purpose of this Workshop is to highlight and review the most pressing problems in gravitation and cosmology, dark matter and dark energy, hadron physics associated with QCD, as well as recent observational/experimental data . Presentation and discussion of issues in general quantum field theory and relevant historical, philosophical and methodological aspects are envisaged. Hopefully, this will allow to get fresh information on progress in these fields and to provide an active discussion both of results and problems.

 To this end a 1-hour general discussion session after each section of talks with a summary from the discussion leader will be arranged.

**Topics to be discussed**

* Gravitation & Cosmology
* Particle Physics: Experiment and Phenomenology
* General Quantum Field Theory
* History, philosophy, methodology

**Participation**

***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.

**There is no registration fee.**

**Structure of the workshop**

* Participation will be available both **in person and online**.
* **Speakers by invitation only.**
* Two sessions with 4-5 invited talks of **40 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.
* **Only registered participants can follow the sessions and take part in the discussions.**
* Proceedings of the workshop will be published in **Physics of Elementary Particles and Atomic Nuclei** of the Joint Institute for Nuclear Research (JINR, Dubna)
* The session summaries are envisaged to be placed jointly in the arXiv (hep-ph).

**IMPORTANT DATES**

* November 26, 2023 - end of registration
* November 14, 2023 - end of abstract submission
* November 27, 2023 - end of presentation submission
* November 28, 2023 - start of the Workshop

**The Organizing Committee**

V. Petrov Chairman R. Ryutin Co-Chairman

V. Bornyakov Y. Kharlov

V. Kotliar R. Rogalyov

Yu. Pirogov O. Zenin

R. Zhokhov Yu. Zinoviev

V. Soloviev

<https://indico.ihep.su/event/hepftXXXV>

hepft2023-hposi-questions@ihep.ru

***Dear Colleagues,***

***We kindly ask you to submit the abstract of your talk (at least in a condensed form) via  [this web-page](https://indico.ihep.su/event/725/abstracts/)  (or via e-mail, in case of problems).***

***This would help us to arrange the program and the corresponding discussions in advance.***

## ****Wishes to speakers****

* As one can see from the program, our Workshop concerns various fields sometimes very different from each other, both conceptually and in technical terminology.
* That is why we would like to avoid excessive diversification and to try to preserve to a certain extent the unity of the high energy physics community.
* In this regard, we would like to ask all speakers, if possible, to kindly avoid, if possible, details that are understandable only to a narrow circle of deeply involved experts  and to make the presentation simpler and clearer (thus more interesting!)  to a wider circle of participants.
* We also believe that it would be of great importance to give, at least in a concise way, the conceptual motivation of your subject.

**We are aware that this task can be rather difficult, so in no way the above wishes are mandatory and  every speaker is, certainly, free to deliver her/his talk according to  her/his own desire and convenience.**

## ****Wishes to discussion leaders****

* It is assumed that each session will end with a general discussion (near one hour).
* The discussion is led by the discussion leader.
* The first part is assumed to be devoted to additional questions which bear a conceptual character, which are collected by technical coordinators and then sent to the discussion leader. It is meant that during the talk time only technical short questions not bearing a conceptual character are admitted. This is regulated by the chairperson.
* In the second part the discussion leader is asked to give a brief summary of the session's reports and a brief description of the most important unresolved problems related to the topic of the session.
* The allocation of time for discussion and summary is  left to the discretion of the discussion leader.