

SCIENCE BRINGS NATIONS TOGETHER



JOINT INSTITUTE FOR NUCLEAR RESEARCH

## JINR Newsletter #30, 20 October 2022

*Dear colleagues and friends,*

*This time, we start on a sad note. On 19 October, Valery Rubakov, our colleague, a member of the JINR Scientific Council, a truly outstanding scientist and person, passed away. This is an untimely loss for the entire world science.*

*Today, JINR is hosting a guest meeting of the State Duma Committee on Science and Higher Education. The topic of the meeting is legislative support of science cities.*

*We are looking forward to some bright events this Friday. VBLHEP will host an international seminar dedicated to the anniversary of JINR Vice-Director Vladimir Kekelidze "Cognition of matter through kaons and baryons". DLNP starts a series of seminars "Useful skills of a researcher", including topics such as scientometrics, presentation design, the art of public speaking, and much more.*

*In this issue of the JINR Newsletter, you will find a new podcast and a programme with JINR scientists, Blokhinka book recommendations, the latest events from the Institute's life. This weekend, we continue to root for Vladislav Shalaev at the competitions of the Vyzov show on the TNT channel.*

**JINR Press Office**



**Telegram**  
[@jinrofficial](#)

## Breaking News

### **Meeting of State Duma Committee on Science and Higher Education at JINR**

The State Duma Committee on Science and Higher Education will hold an extended guest meeting in Dubna at the Joint Institute for Nuclear Research on 20 October. Participants are going to discuss the support measures for the formation of favourable conditions to attract investment in the economy of science cities. The experience will be presented in development and efficient use of the scientific and technical potential of the science cities in the Moscow Region and Dubna as an example of a technopolis.



[READ MORE ➡](#)

## JINR Information Centres

### Physics School in Kamchatka

JINR representatives took part in the 2nd International Kamchatka School on Physics at Kamchatka State University from 12 to 14 October. JINR scientists held lectures and workshops for participants. As part of the School, the exposition "From Copernicus to Newton" was opened and became an event of the JINR additional programme of the International Year of Basic Sciences, IYBSSD 2022.



[READ MORE ➡](#)

## Cooperation

### JINR international experience for MBIR

On 14 October, representatives of the IRC MBIR Consortium discussed the JINR experience in organizing scientific collaborations and areas of mutual scientific interests at a meeting with the Directorate of the Joint Institute in Dubna. Participants proposed to draw up a single neutron programme, which will involve different types of reactors: the future PIK reactor, the FLNP JINR IBR-2 Pulsed Reactor, and the MBIR reactor.



[READ MORE ➡](#)

### Status of cooperation with China

The current state and prospects of scientific and technical cooperation with the People's Republic of China were discussed at the Joint Institute on 13 October. Participants of the international scientific collaborations in JINR and China spoke about their mutual involvement in the scientific projects of these collaborations. The meeting highlighted the scale of the current cooperation

between the Institute's laboratories and research organizations and universities of the PRC and the great potential for the development of this cooperation.

**READ MORE** ➡

### **Plenipotentiary Representative of Egypt met with JINR leadership**

On 19 October, Plenipotentiary Representative of the Government of the Arab Republic of Egypt in JINR Mahmoud Sakr and Vice-Director Latchesar Kostov with representatives of the Institute's leadership discussed the upcoming November Committee of JINR Plenipotentiaries and steps to develop cooperation at an online work meeting.

**READ MORE** ➡

## **Research**

### **MPD experiment – another step forward**

VBLHEP JINR specialists installed the last three plates of the yoke of the MPD Facility of the NICA Complex. Each plate weighs 18 tons. Now the team will be able to start installing and assembling the cryogenic and vacuum equipment. After that, the positions of the yoke, solenoid, and the correction coils assembled in June-July of this year will be measured for a computer modeling.



**READ MORE** ➡

## **Conferences**

### **Problems of condensed matter physics being discussed at BLTP JINR**

On 17 October, the International Conference "Modern Problems of Condensed Matter Theory" started at the Bogoliubov Laboratory of Theoretical Physics JINR. Participants are considering current theoretical research on condensed matter physics. The event brought together more than 90 participants from JINR and scientific centres of Belarus, Russia, Slovakia, Uzbekistan.

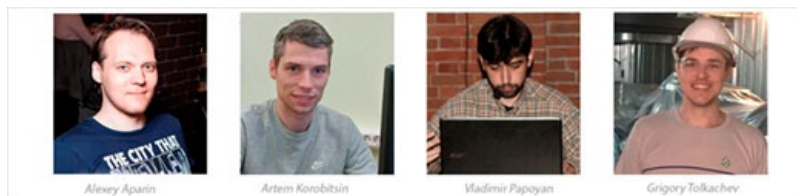


**READ MORE** ➡

**We are the champions!**

## JINR team won hackathon

The JINR team took the 1st place in the hackathon on the application of machine learning methods in particle identification tasks! The final competition lasted eight hours. The JINR team used the CatBoostClassifier decision tree and the resources of the supercomputer "Govorun" to solve the task.

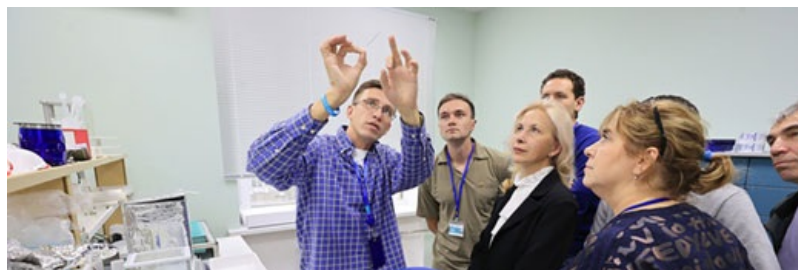


[READ MORE ➡➡](#)

## Education

### Primorsky Krai teachers at JINR School

On 3-7 October 2022, JINR hosted a Scientific School for teachers from Primorsky Krai. The visits to the JINR Basic Facilities exhibition, the Institute's laboratories, the Blokhinka Library, and Dubna University were organized for teachers. One of them shared their expressions of the event.



[READ MORE ➡➡](#)

### Meetings for future engineers

For children aged 10-11, there are engineering meetings where participants assemble mechanisms from improvised materials with their own hands according to the book "Become an Engineer" by Tatiana Galatnova. This Saturday, on 22 October, future engineers will make a pantograph for drawing.

[READ MORE ➡➡](#)

## Announcements

### Anniversary seminar of V. D. Kekelidze

On 21 October, the Laboratory of High Energy Physics will host an international seminar dedicated to the anniversary of a RAS Corresponding Member V. D. Kekelidze "Cognition of matter through kaons and baryons". There will be reports on NICA, MPD, SPD, and other interesting reports.

[READ MORE ➡➡](#)

### What skills does a researcher need?

DLNP JINR starts a series of seminars "Useful skills of a researcher". The first seminar in the series will be held tomorrow, on 21 October, at 11:00 AM. Valentina Litsitis will talk about the scientometric indicators of a scientist. What

is scientometrics and how can it be useful to a scientist?

[READ MORE →](#)

## In memory of brilliant colleagues

### In memory of Valery Rubakov

On 19 October, Academician Valery Anatolievich Rubakov passed away at the age of 67. He was an outstanding scientist, one of the world's leading experts in quantum field theory, particle physics, and cosmology. Developing the scientific school of N. N. Bogoliubov, A. N. Tavkhelidze, and V. A. Matveev, V. A. Rubakov created his own the world-recognised scientific school of theoretical physics.



[READ MORE →](#)

### In memory of Alexei Sissakian

On 14 October 1944, Alexei Sissakian was born, the JINR Director in 2005-2010, a great scientist in the fields of elementary particle physics, theoretical and mathematical physics. He was an ideologist and the first leader of the NICA Megascience Project.



[READ MORE →](#)

## Books

### Exhibition of old books

Blokhinka continues the series of exhibitions “Sir, to the blackboard!” with book rarities from the times of the Russian Empire introducing the study of classical languages: ancient Greek and Latin. At the book exhibition you can find textbooks of 1913, 1883, 1867, and even 1835!



**MORE about books →**

### **Books about parting**

Blokhinka has prepared three books that can support, inspire, and suggest how to act in a difficult period of life: “The Kite Runner” by Khaled Hosseini, “Gone with the Wind” by Margaret Mitchell, “Pax” by Sarah Pennypacker. Read and share your impressions!

**MORE about books →**

## **Sports**

### **Weightlifting Tournament**

On 16 October, a weightlifting tournament dedicated to the memory of an Honored Coach of Russia, Master of Sports of the USSR Yu. V. Masloboev finished at the JINR Sports Club. Representatives of 5 teams from four cities of the Moscow region took part in the tournament.



**FIND OUT the results →**

## **Media**

### **The last MPD yoke plate installed**

In the Laboratory of High Energy Physics JINR, the assembly of the magnet yoke of the MPD Multipurpose Detector of the NICA Collider Complex was completed. The yoke consists of 28 steel plates each weighing 18 tons. The top one was installed on 14 October.

**WATCH →**

### **TV programme filmed at FLNP**

Watch the new plot of “Black Holes. White spots” programme on Cultura Channel or Smotrim.ru service. The story, filmed at the Laboratory of Neutron Physics JINR, concerns the scientific infrastructure of the Laboratory, neutron activation analysis and how it's used in ecology.

**WATCH →**

### **New podcast about NICA**

We offer you to listen to the popular science podcast “We will all die. But we are not sure” where Sergei Merts spoke about NICA. The podcast is made by RIA Novosti.



**LISTEN** ➡

### **JINR Weekly Newspaper issued**

New issue of the JINR Weekly Newspaper #40 has been published. Please note that you can read an English version on the JINR Newspaper's website.

**READ MORE** ➡

## **Upcoming Events**

### **Conferences**

- [\*\*17 – 22 October 2022\*\*, International Conference “Modern Problems of Condensed Matter Theory”. BLTP JINR, Dubna](#)
- [\*\*21 October 2022\*\*, International seminar dedicated to the anniversary of a RAS Corresponding Member V. D. Kekelidze “Cognition of matter through kaons and baryons”. VBLHEP JINR, Dubna](#)
- [\*\*22 – 27 October 2022\*\*, International Conference “Close prospects on superheavy element research”. Dilijan, Armenia](#)
- [\*\*24 – 28 October 2022\*\*, XXVI International Conference of Young Scientists and Specialists \(AYSS-2022\). MLIT JINR, Dubna](#)
- [\*\*25 - 27 October 2022\*\*, International Conference “Current problems in radiation biology. To the 60th Anniversary of the Scientific Council of the Russian Academy of Sciences on Radiobiology”. International Conference Centre, Dubna](#)

### **Seminars**

- [\*\*20 October 2022\*\*, at 11:00 AM, VBLHEP. “Study on the effect of photon self-absorption on the detection efficiency of HPGe detector in measurements of an activated uranium sample” by Tran Ngoc Toan](#)
- [\*\*20 October 2022\*\*, at 11:00 AM, DLNP. “Cavities of accelerating systems of isochronous cyclotrons for proton therapy” by S. V. Gurskiy](#)
- [\*\*20 October 2022\*\*, at 2:30 PM, VBLHEP. “New methods in classical and quantum field theory with extended supersymmetry” by E. A. Ivanov, I. L. Buchbinder](#)
- [\*\*21 October 2022\*\*, at 11:00 AM, DLNP. “Scientometric indicators of a scientist” by Valentina Litsitis](#)
- [\*\*27 October 2022\*\*, at 4:00 PM, BLTP. “Mass hierarchy of leptons and quarks as hidden symmetry” by Segey Kovalenko](#)

### **Culture**

- [\*\*20 October 2022\*\*, at 7:00 PM. JINR Universal Public Library. Meeting of the book club “Hairpin”: discussing the book “Sweetness of forgetting” by Kristin Harmel](#)

- [20 October 2022](#), at 7:00 PM. JINR Cultural Centre “Mir”. Music Talk. Classical music and talks about it with Sergey Pospelov
- [22 October 2022](#), at 5:00 PM. JINR Cultural Centre “Mir”. Documentary film “Earth: One Amazing Day” at JINR Cultural Centre “Mir”
- [22 October 2022](#), at 5:00 PM. JINR Universal Public Library. Concert story
- [23 October 2022](#), at 5:00 PM. JINR Cultural Centre “Mir”. Documentary film “Mountain” at JINR Cultural Centre “Mir”
- [25 October 2022](#), at 5:00 PM. JINR Cultural Centre “Mir”. Ave Maria. Concert by Festive male choir of Moscow Danilov Monastery and Siberian male choir
- [26 October 2022](#), at 7:00 PM. JINR Scientists’ Club. Classical music concert
- [26 October 2022](#), at 7:00 PM. JINR Cultural Centre “Mir”. Recital by Nikolay Drozdov

#### For Kids

- [22 October 2022](#), at 5:00 PM. JINR Universal Public Library. Let’s READers
- [22 October 2022](#), at 5:00 PM. JINR Universal Public Library. Meeting of the club “Children’s reading through the eyes of adults”

**ALL JINR EVENTS** ➡➡

© Joint Institute for Nuclear Research

Joliot-Curie str 6, Dubna, Moscow region, Russia, 141980

[press@jinr.int](mailto:press@jinr.int)

