



JINR Newsletter #15, 7 July 2022

Dear colleagues and friends,

The central event of the scientific world this week is the start of the Year of Basic Sciences for Sustainable Development. JINR is one of its co-organisers. Join the [opening ceremony online](#) on 8 July at 11:00 AM (Moscow time).

The Meeting on Heavy Ion Physics organised by FLNR JINR is completing its work in St. Petersburg. The thematic meeting has become the largest one held in Russia in this industry for more than two years.

At the beginning of the week, together with the entire world scientific community, we celebrated the 10th anniversary of the discovery of the Higgs boson. Read several materials dedicated to this event in the Newsletter.

Next week, the Institute will celebrate Naadam, which is a national holiday of Mongolia, a JINR Member State.

You will also find information about our conferences, awards, and research. AYSS seminars are on vacation now, but the JINR Cinema Club is still with us. There is also a couple of interesting offers for book lovers and for those who would like to do active sport. Read about all this in the new issue of the JINR Newsletter.

JINR Press Office



Breaking News

Heavy ion physics issues discussed in Saint Petersburg

On 4 July, at the meeting in Saint Petersburg, the RAS Council considered a number of issues related to the development of the infrastructure and research in the field of heavy ion physics. The Council meeting was held in the frames of the meeting on Heavy Ion Physics organised by FLNR JINR from 4 to 8 July in the city on the Neva.



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Celebrating Higgs boson anniversary

Interview with Victor Matveev on 10th anniversary of Higgs boson discovery

On 4 July 2012, 10 years ago, the discovery of the Higgs boson was officially announced. The Higgs boson plays a key role in the mechanism of mass generation of other elementary particles. Scientific Leader of the Joint Institute for Nuclear Research, RAS Academician Victor Matveev congratulated his colleagues and explained why the discovery of the particle was so important for fundamental science.



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Every year it becomes more and more difficult to narrow area of unknown

What did the Higgs boson give fundamental science from the point of view of the Standard Model of Elementary Particles? What are the prospects for research in this direction? We talked about it with participants of the recent meeting Dimuon Physics within the CMS experiment at the LHC. This is one of the two experiments with active participation of JINR scientists, who, along with the ATLAS experiment, conducted a long-term search for a mysterious particle.

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Awards

Flerov International Prize honours brilliant scientists

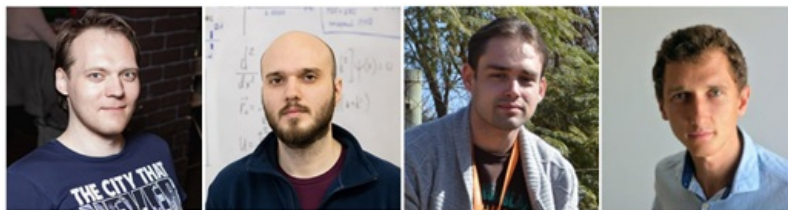
At the meeting of the RAS Council on Heavy Ion Physics in St. Petersburg, the Flerov International Prize has been presented to three outstanding scientists, staff members of the Khlopin Radium Institute.



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JINR scientists won RSF youth competitions

The Russian Science Foundation has announced the winners of the youth competitions 2022 of the RSF Presidential Programme, as well as the project extension competition of 2019 youth groups. Four employees of the Joint Institute are among the winners.



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JINR Information Centres

IT School at North Ossetian State University – meeting place for Information Centres family

The 4th Summer IT School on the basis of the JINR Information Centre in Vladikavkaz has become international. For the first time, in addition to universities of the Southern Federal District, universities of other regions and JINR Member States have taken part in the School. In the frames of the School, representatives of the recently opened JINR information Centres in Russia visited the JINR Information Centre at NOSU. Three thematic round tables were included in the school programme for them.

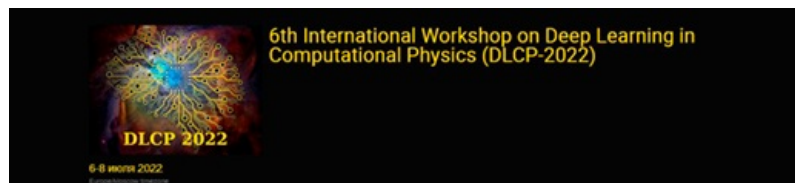


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Conferences

Deep Learning in Computational Physics discussed in MLIT

On 6 - 8 July, MLIT JINR is hosting the 6th International Workshop on Deep Learning Computational Physics (DLCP-2022). The workshop primarily focuses on the use of machine learning in particle astrophysics and high-energy physics, but is not limited to this area. Participants will discuss various applications of artificial neural networks to physical problems, as well as the development of new modern machine learning methods for analysing various scientific data, including big data.

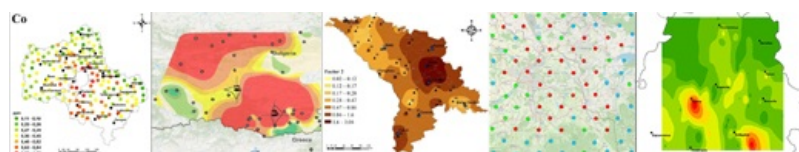


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Research

Mosses will tell you everything

In 2015 - 2016, scientists from the Sector of Neutron Activation Analysis and Applied Research of the Nuclear Physics Department of FLNP JINR analysed numerous moss samples taken from the territories of several JINR Member States. Biomonitoring has been conducted in Belarus, Bulgaria, Vietnam, Georgia, Moldova, Central Russia, and the Czech Republic.



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Reflector of very cold neutrons increased their extraction tenfold

Scientists of FLNP JINR, as part of an international collaboration, conducted research on the enhanced directional extraction of very cold neutrons using a diamond nanoparticle powder reflector. The development allows increasing tenfold the flux of very cold neutrons at research facilities.

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Education

JINR: about big science for school teachers

From 26 June to 2 July 2022, the Joint Institute for Nuclear Research was hosting the 11th International Scientific School for Physics Teachers. Physics teachers from various regions of Russia from Kaliningrad to Petropavlovsk-Kamchatsky and from Novy Urengoy to Saratov have taken part in the School. Teachers from Armenia have come to the School for the first time.



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JINR Public Council discussed educational issues

After a one-year break, the Public Council under the JINR Directorate has resumed its work with new members. This time, participants of the meeting have discussed the work of a number of educational institutions supervised by JINR.

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“Physics. Mathematics. IT”

The 6th Summer School “Physics. Mathematics. IT” is in full swing. 57 high school students from 28 cities of Russia gathered at the University “Dubna”. JINR scientists are actively participating in the School with lectures and activities. Read about how it goes in the school group on VK.

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Announcements

JINR Cinema Club

This Saturday, 9 July, you can enjoy watching the interesting film “Who’s Afraid of Virginia Woolf?” by Ernest Lehman in the company of cinemaphiles who have brought back to life the beloved JINR Cinema Club.



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AYSS seminar going on vacation

AYSS seminars at the JINR Scientists' Club have gone on summer vacation. The cycle of seminars is planned to resume on 8 September at the same time and in the same place.

In the meantime, a few intermediate interesting figures:

- we have listened to 7 reports in a month and a half;
- integrally, 327 people have attended these seminars (a record number of listeners at the last seminar: 64 people);
- 189 questions have been asked;
- and 255 cups of coffee have been drunk.

In the [album](#) of the group you can find a huge number of wonderful photos from the seminars.

See you again and have a good time!

“Let the book go free!”

Recently, shelves for book exchange have appeared in the main building of the Laboratory of Nuclear Problems JINR and in the recreation room next to the Conference Hall on the third floor in the Radio-Chemical Laboratory. There are already books there. You are welcome! Please take books, read them, and bring your own! It's so nice to hold a real paper book in your hands.

AYSS invites cheerful sharpshooters

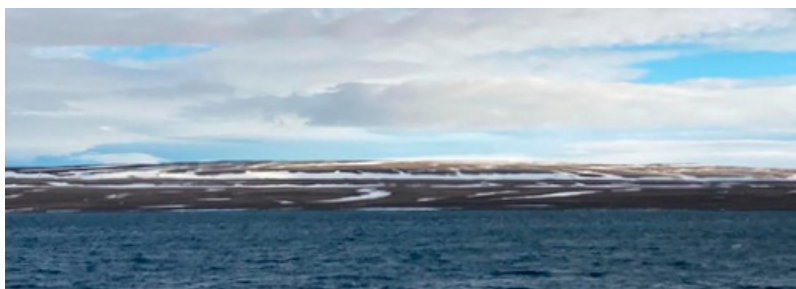
There is a great opportunity to actively spend time in nature together with colleagues. AYSS has decided to organise paintball and laser tag games for JINR employees. The event is scheduled for 9 July 2022. You can still join!

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Media

JINR in Arctic

[#jinr_in_Arctic](#) - using this hashtag in [our Telegram channel](#), you can follow the expedition of the Arctic Floating University in the Barents Sea. On 24 June, Marina Frontasyeva and Nikita Yushin (FLNP) went to the expedition on behalf of JINR. They are collecting samples of mosses, soils, and plankton of the Arctic to assess the quality of ecology in the region.



OUR TELEGRAM CHANNEL ➡

“Let’s say that NICA is a pizzeria”

If you missed the report of Dmitry Egorov (VBLHEP JINR) at the AYSS seminar, you can listen to it now. Dmitry talks about detector experiments being created and already working at the NICA accelerator complex from the point of view of an engineer. He also explains how to use modern information technologies to optimise experiment monitoring and the importance of tea breaks at work. Less physics, more pictures.

WATCH ➡

JINR Weekly Newspaper issued

New issue of the JINR Weekly Newspaper #25 has been published. Please note that you can read an English version on the JINR Newspaper’s website.

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Sports

Dubna Open Tennis Championship

We invite all Dubna tennis fans to take part in the 11th tennis tournament among veterans “Dubna Open Championship” on 8 - 12 July.



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Upcoming Events

Conferences

- [10 – 16 July 2022, 28th International Conference “Symmetry methods](#)

[in Physics". Yerevan, Armenia](#)

- [15 – 17 July 2022, XXVI Summer School for Young Scientists and Specialists \(Lipnya-2022\). JINR Tourist Base "Lipnya", Lipnya island, Ivankovskoe reservoir](#)

Seminars

- [11 July 2022, at 11:00 AM, BLTP, Blokhintsev Conference Hall \(4th floor\). BLTP Journal Club](#)
- [13 July 2022, at 3:00 PM, MLIT. "Mathematical models, methods and algorithms for processing encrypted data in distributed environments" by Mikhail Babenko](#)

Culture

- [9 July 2022, at 6:00 PM. JINR Scientists' Club. Cinema Club](#)

ALL JINR EVENTS →

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