



## JINR Newsletter #32, 28 August 2024

Dear colleagues and friends,

JINR has extensive expertise in accelerator technology, particularly in cyclotrons. In order to share this experience and deeply study the engineering and operating principles of main cyclotron systems, JINR collaborated with MEPhI to hold the International School of Accelerator Physics, taking place this week.

In the latest issue of the JINR Newsletter, you will find a number of JINR publications dedicated to the NICA Project, read about interesting events with the participation of JINR researchers, and even discover a chance to find a hobby by visiting the JINR Mir Cultural Centre.



### Conferences

#### JINR holding International School on cyclotrons

The school, co-organized by JINR and Moscow Engineering Physics Institute, is taking place on 26–30 August. More than 50 international participants will hear lectures by leading specialists of nuclear research centres, visit the Superheavy Element Factory, and enjoy social events. You can watch the online broadcast [via the link](#).

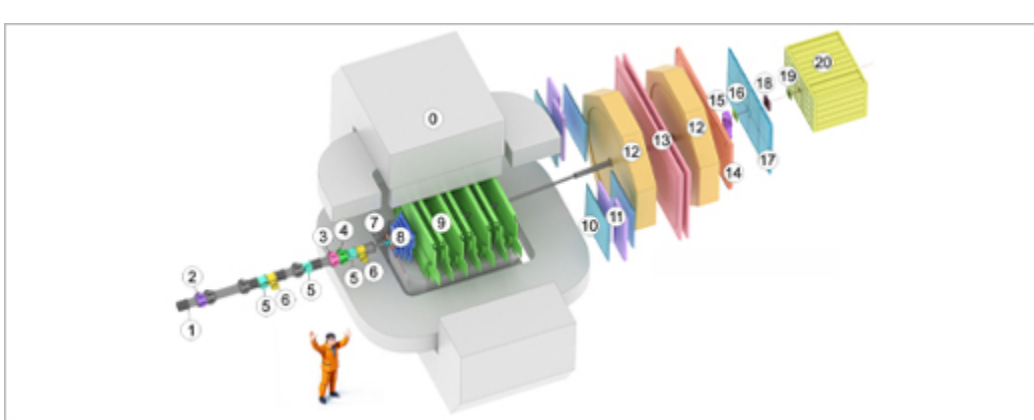


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### Publications

#### Description of BM@N Spectrometer at NICA Accelerator Complex

A team of researchers from the Joint Institute for Nuclear Research and scientific and educational centres in Bulgaria, China, Israel, Kazakhstan, Russia, and Uzbekistan prepared a technical description of the spectrometer including all its subsystems. The article was [issued](#) in *Nuclear Instruments and Methods in Physics Research – section A*.



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#### On energy of pion collisions at NICA

A team of scientists from VBLHEP at JINR and three Mexican higher education institutions studied collision energy dependence of source sizes for primary and secondary pions at energies available at the NICA Accelerator Complex at JINR from Lévy fits. The results were [published](#) in *The European Physical Journal A*.

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#### Density distribution of samples printed by fused filament fusion

Researchers of VBLHEP at JINR, Tomsk Polytechnic University, and Tomsk National Research Medical Centre of the Russian Academy of Sciences used X-ray to study the density distribution of samples printed by fused filament fusion with different fill patterns. *Journal of Instrumentation* [published](#) the results of this study.

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### Announcements

#### Open day at JINR Cultural Centre

On 7 September 2024, at 12:00 PM, the JINR Mir Cultural Centre invites everyone interested to tour all its public spaces, get to know the leaders of its creative teams, and learn about the history of the development of its culture and art.



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#### STEM classes for children

The LAB Research Studio announces two courses to be held this academic year: mathematics for schoolchildren from 4 to 8 grades and robotics for children aged 8–13. The teachers are employees of JINR and Kadyshesky Lyceum. More information and registration are available [via the website](#).

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#### Biotechnology forum

From 24 to 27 September, Koltsovo, Russia, will host the OpenBio Forum. Participants will have the chance to enjoy rich business, scientific, and social programmes. The event will take place in a hybrid format. You can find more details and register [via the website](#).

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### Media

#### Bruno Pontecorvo anniversary

22 August marked the 111th anniversary of the world-renowned researcher. You can find out about his main scientific achievements in the JINR Telegram channel, visit the [memorial website](#), and read the *Life and Ideas of Bruno Pontecorvo* book, now available in English at the JINR Science and Technology Library.



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#### JINR and ASI to sign agreement and develop Dubna

The meeting took place at the Agency for Strategic Initiatives (ASI), following the visit of the Agency's Director General to Dubna. Deputy Director of the Laboratory of Neutron Physics Sergey Kulikov spoke about the results of the discussion.

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#### Hamlet Khodzhibagiyev on his prize-winning engineering solution

In 2023, Deputy Director of the Laboratory of High Energy Physics for Scientific Work won the National Vyzov Prize. We invite you to enjoy a short video where the researcher shares his thoughts about his invention.



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#### JINR researcher at All-Russian seminar

At the Supercomputer Architecture Research Centre All-Russian Seminar in Sarov, Scientific Leader of the JINR Laboratory of Information Technologies Vladimir Korenkov introduced students to methods and technologies of data processing in heterogeneous computing environments.

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#### JINR at youth accelerator conference

From 18 to 24 August, Budker Institute of Nuclear Physics hosted the first Russian Particle Accelerator School. Young JINR researchers participated in the event. They heard lectures, visited the Institute's primary facilities, and networked with colleagues from other research centres and universities.

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#### Video about main JINR events

We offer you to watch a video review of highlights from the life of the Institute.

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### Sports

#### JINR at half marathon

On 24 August, Dubna hosted the Big Volga Marathon. More than 1600 athletes participated, including a number of JINR employees. Three of them were among the winners and runner-ups, representing the Institute's Administration, the Laboratory of Neutron Physics, and the Laboratory of Nuclear Reactions. Congratulations on the successful performance!



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### Upcoming Events

#### Conferences

- [25 – 30 August, International School on Accelerator Physics: Cyclotrons, Moscow Region, Verbilki village](#)
- [4 – 6 September, ARIADNA Collaboration meeting, JINR, Dubna](#)

#### Seminars

- [29 August, 4:00 PM, BLTP: "Relativistic coupled-cluster and DET approaches: applications in atomic clocks and molecular spectroscopy" by Bavi Kumar \(University of Zürich\)](#)

#### Culture

- [16 July – 1 September, Daily from 1:00 to 7:00 PM \(except Monday\), JINR Mir Cultural Centre, Art exhibition](#)
- [3 – 29 September, Daily from 1:00 to 7:00 PM \(except Monday\), JINR Mir Cultural Centre, Antigravity exhibition of watercolour landscapes](#)
- [29 August, 7:00 PM, JINR Universal Public Library, Summer Reading List book club](#)
- [30 August, 6:00 PM, JINR Universal Public Library, English speaking club](#)
- [1 September, 2:30 PM, JINR Mir Cultural Centre, Art exhibition closing ceremony](#)
- [1 September, 4:00 PM, JINR Mir Cultural Centre, World of Science and Miracles, Children's holiday](#)
- [1 September, 5:00 PM, JINR Mir Cultural Centre, The Golden Key play](#)

#### For kids

- [30 August, 6:00 PM, JINR Universal Public Library, Growing up from "Let's READers"](#)

[ALL JINR EVENTS →](#)