



# JOINT INSTITUTE FOR NUCLEAR RESEARCH

International Intergovernmental Organization

*V. Kekelidze*

## **Information on the Resolution of the JINR Scientific Council**

135th session, 15–16 February 2024

and

## **on the decisions of the JINR Committee of Plenipotentiaries**

22 March 2024, Dubna



# Information on the Resolution of the JINR Scientific Council

135th session, 15–16 February 2024, hybrid mode

Co-chaired by **Grigory Trubnikov** and by **Sergei Kilin**





# PROGRAMME: 135th session of the JINR Scientific Council

15–16 February 2024

15 February

- **Report by the JINR Director (G.V. Trubnikov)**
  - *The most notable scientific **results** and **events** of 2024*
  - *The results of the implementation of the **7-Y Plan for the Development of JINR (2017–2023)***
- Appointment of the **Editing Board** for drafting the **Resolution of the Scientific Council (S. Kilin)**
- Recommendations of **the Programme Advisory Committees**  
taken at the meetings in January 2024 (*I. Tserruya, V. Nesvizhevsky, D. L. Nagy*)
- Amendments to the **Regulation** for the **election of Directors** and for  
the **endorsed appointment of Deputy Directors** of JINR Laboratories (*S. Nedelko*)
- Election of **Deputy Directors of DLNP and FLNP**  
and announcement of vacancy of the position of **Director of FLNR**

# PROGRAMME: 135th session of the JINR Scientific Council

15–16 February 2024

16 February

- **Reports by young scientists** as recommended by the **PACs**
- Proposals for awarding the title "**Honorary Doctor of JINR**"
- Jury's recommendations on the **award of JINR annual prizes** for best papers in the fields of
  - theoretical and experimental research,
  - methodology and technology research,
  - applied technology research (**L. Kostov**)
- Announcement of vacancies of positions in the **Directorates of JINR Laboratories** (**G. Trubnikov**)
  
- General discussion. Adoption of the **Resolution of the Scientific Council**



## JINR Scientific Council

– **SC** took note of the comprehensive report by the JINR Director, **G. Trubnikov**, covering the latest session of the **CP** (9–10 November 2023), the results of the implementation of the **7-Y Plan** (2017–2023), the progress in the **projects realization** (Topical Plan **2024**), and the **international cooperation**.

- **SC** appreciated the impressive results in developing **the large research infrastructure**, significant contribution to **international cooperation**, especially at **CERN**, and **recent achievements**.

- **SC** endorsed the **new Regulation** for the election of **Directors** & for the endorsement of appointment of **Deputy Directors** of the **Laboratories**, proposed by the **JINR Directorate**, and recommended its approval at the next **CP** session in **March 2024**.

**SC** approved to award the title “**Honorary Doctor of JINR**” to Prof. **Chavdar Stoyanov** (Bulgaria).





*SC appreciated with satisfaction:*

- the completion of the production & cryogenic testing of the **collider's magnetic system**, readiness for commissioning the **power supply system** for the collider's elements, preparations for the launch of a **new cryogenic compressor station**, beginning of **educational program** to train operators for commissioning & operation of the **NICA complex**;

- progress in the **reconstruction of data** recorded by the **BM@N** experiment, in particular, statistically significant signals of  $\Lambda$ ,  $\Xi$  and  $K^0_s$  for further physics analysis;

- progress in the production of all **components of the MPD first-stage detector** with minimal delays;

- presentation of the updated **SPD TDR** at the **PAC** in **Jan. '24**, & the start of a review process of the updated **TDR** by the new international **DAC** appointed in **Dec. '23**;

**15 February** the **SC members** visited the **VBLHEP** & inspected the **NICA accelerator complex** under construction.



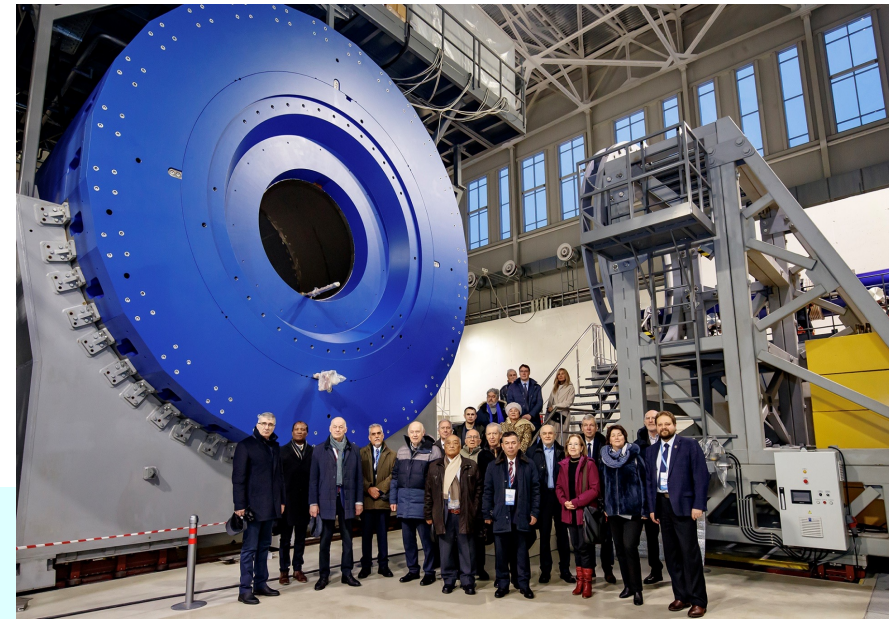
Collider magnetic system



new compressor station



modernized and automated  
GPP1 Station (40.8 MW)

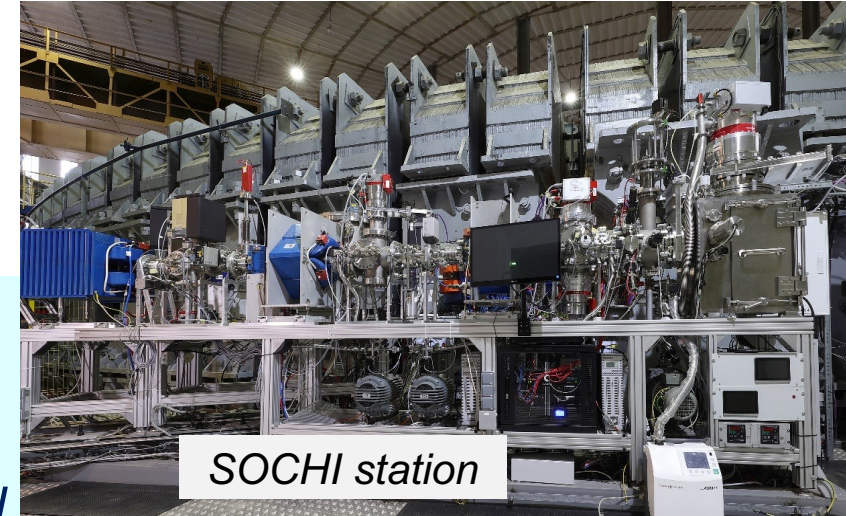




# JINR Scientific Council



- **SC** appreciated with satisfaction the development of the **ARIADNA** collaboration, whose **applied research program** was launched at the **NICA complex** in the beginning of **2023**, testing of the **SOCHI** station with the **Ar** beam, & installation of two other stations
- **SIMBA & ISCRA.**



In the presence of **SC** members, the **grand opening** of 2 stations for applied research was held: **Station for Investigation of Medical Biological Objects (SIMBO)** and **Irradiation Station of Components of Radioelectronic Apparatus (ISCRA).**



together with the **SOCHI** station, they constitute the infrastructure for applied research at **ARIADNA.**

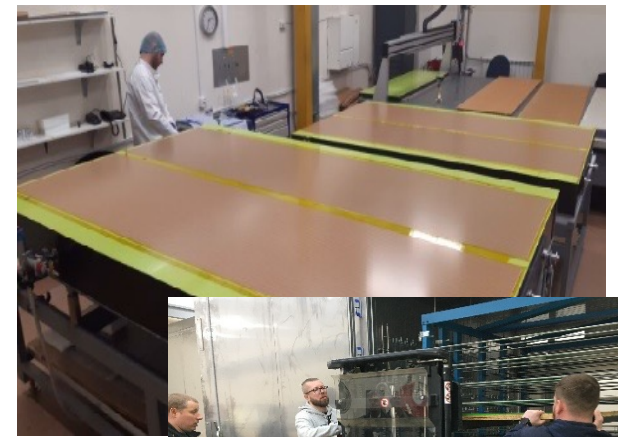


– the successful participation of the **Institute** in the work of collaborations at **CERN**, as well as the high level of activity in the fulfilment of its obligations for the **2-nd phase** of upgrade of the **ATLAS**, **CMS**, and **ALICE**;

- progress in developing the **Baikal-GVD** deep-water neutrino telescope, installation of **576 OM** & **2 bottom cable lines** in **2023**, as well as manufacturing **470 OM** for installation during the **2024** expedition;

- successful continuation of experiments at the **Factory of Superheavy Elements**, the observation of **2 events** of the new isotope  $^{288}\text{Lv}$  in the reaction  $^{54}\text{Cr}+^{238}\text{U}$ , - important stage in preparation to the synthesis of the **new element 120** in the  $^{54}\text{Cr}+^{248}\text{Cm}$  reaction;

— progress in developing the **DRIBs-III** complex with the modernization of the **U-400M** cyclotron with the first beam expected in the **spring '24**, the progress of construction work for **DC-140** with commissioning expected at the **end '24**, implementation of the construction work in the new **experimental hall of U-400R**;





# JINR Scientific Council

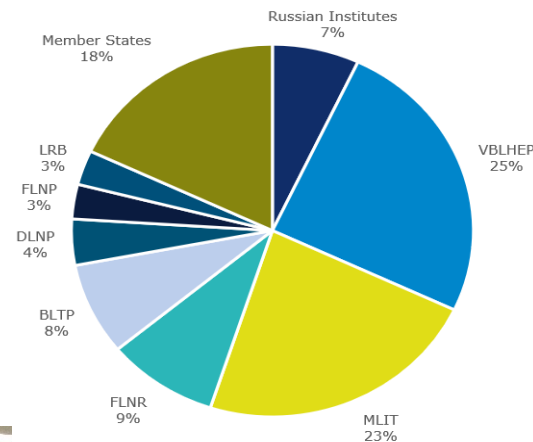
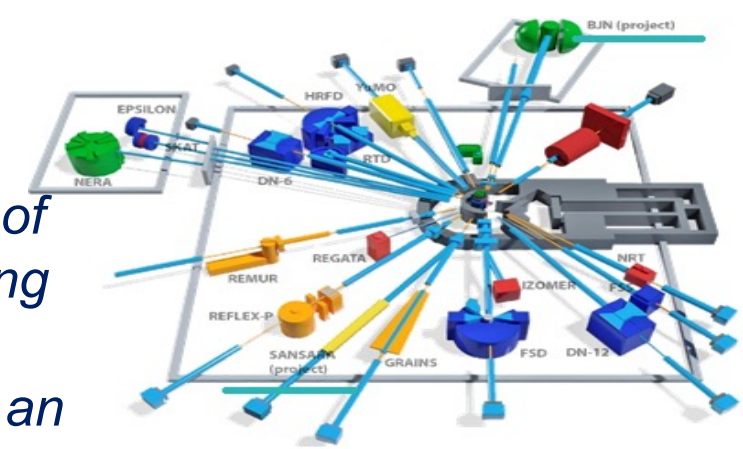
**SC** noted with satisfaction:

— successful implementation of the **plan** to prepare for continuing the **regular operation of the IBR-2 reactor**, & progress in the development of the **spectrometer complex**, in particular, the wide-aperture backscattering detector (**BSD-A**) for the high-resolution **Fourier diffractometer**, small-angle neutron scattering/neutron radiography detector (**SANSARA**), and an **inelastic neutron scattering spectrometer in inverse geometry (BJN)**;

— further active development of fundamental & applied research related to **life sciences & condensed matter physics** due to the development of the **interlaboratory** research program at **LRB**;

— successful work of the **BLTP** & important results in particle, nuclear, condensed matter physics, & advanced mathematical physics, aimed, in particular, at **theoretical support of the JINR experimental program**;

— successful development of the **MICC JINR**, including the expansion of the **Govorun** supercomputer, the use of the **DIRAC** distributed platform to support the collaborations of the **NICA MPD**, **BM@N** and **SPD** experiments, as well as the **Baikal-GVD** neutrino telescope.



## JINR Scientific Council

– **SC** approved the **Jury's recommendations** on awarding the **JINR annual prizes** for best papers in the theoretical & experimental research, methodology & technology research, & applied technology research.

– **SC** endorsed the appointment of **A. Guskov** as **Deputy Director** of the **Dzhelepov Laboratory of Nuclear Problems (DLNP)** until the completion of the term of service of the current **DLNP** Director.



– **SC** endorsed the appointment of **B. Mukhametuly** (Khazakhstan) as **Deputy Director** of the **Frank Laboratory of Neutron Physics** until the completion of the term of service of the current **FLNP** Director.

- **SC** announced the **vacancy** of the **Director's** position at the **Flerov Laboratory of Nuclear Reactions**; the election will take place at the **137th session** of the **Scientific Council** in **February 2025**.

– **SC** agreed on the **extension** of the term of office of all **Deputy Directors** of **VBLHEP** until the election of the **Director** of **VBLHEP**.

– The **136th session** of the **Scientific Council** will be held on **12–13 September 2024**.





## On the Results of Financial Support for the Seven-Year Plan for the Development of JINR for 2017-2023

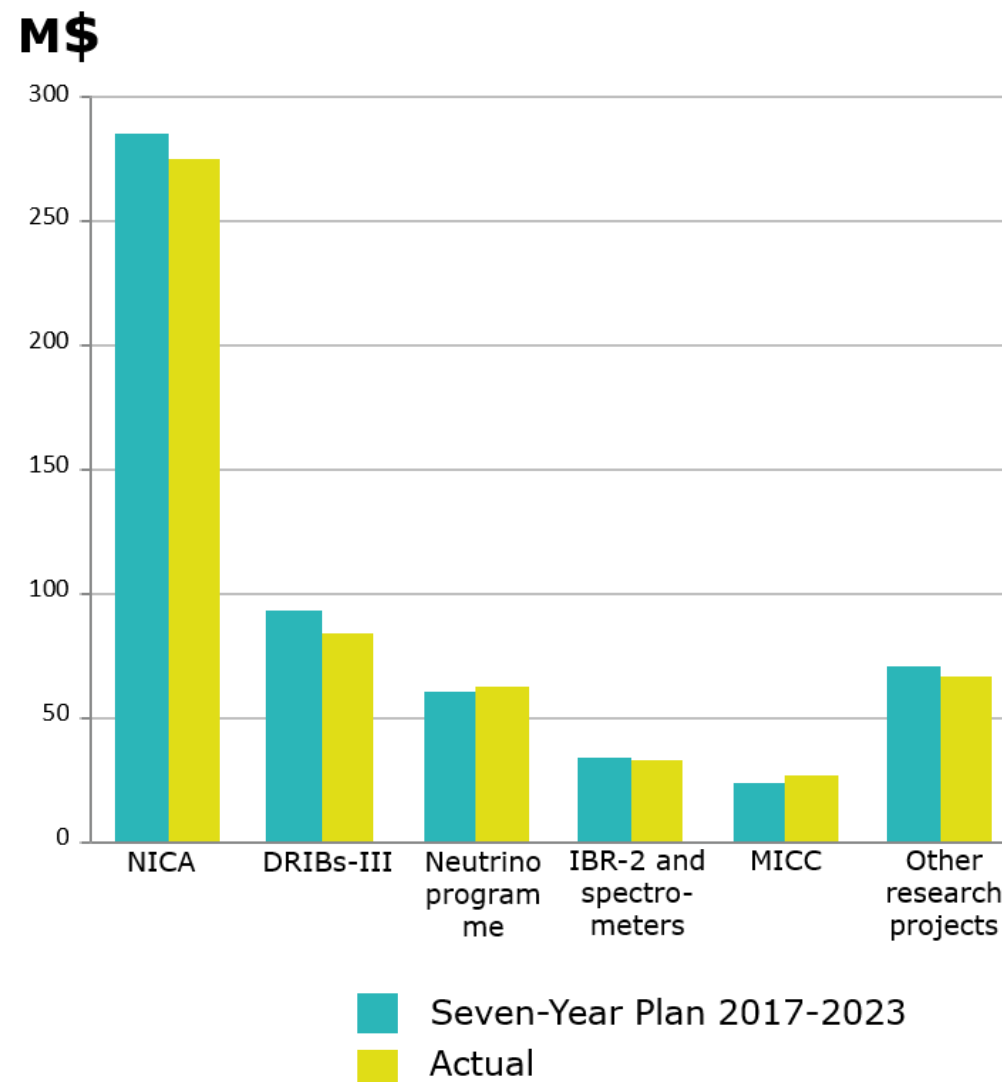
### Execution of the income part of the financial support of the Seven-Year Plan

<b>M\$</b>	<b>Plan</b>	<b>Actual</b>	<b>Execution</b>
<i>Contributions of the Member States (MS)</i>	1 444.0	1 380.5	96%
<i>Payment of contribution arrears of MS</i>	91.7	91.2	99%
<i>Funds received under agreements on science and technology cooperation</i>	-	12.8	-
<i>Other revenues</i>	34.5	57.6	167%
<b>Total</b>	<b>1 570.2</b>	<b>1 542.1</b>	<b>98%</b>



## Material costs for the main research projects of the 7-Y Plan (2017-2023)

<b>M\$</b>	<b>Plan</b>	<b>Actual</b>	<b>Execution</b>
<i>NICA</i>	285.2	275.0	96%
<i>DRIBs-III</i>	93.6	84.5	90%
<i>Neutrino programme</i>	60.2	62.6	104%
<i>IBR-2 and spectrometers</i>	33.9	33.1	98%
<i>MICC</i>	24.1	27.2	113%
<i>Other research projects</i>	70.3	67.4	96%
<b>Total</b>	<b>567.3</b>	<b>549.8</b>	<b>97%</b>





# Information on the Resolution of the session of the JINR Committee of Plenipotentiaries, 22 March 2024, Dubna

Chair of the Committee of Plenipotentiaries — representative of Georgia **A. Khvedelidze**





## Session of the JINR CP

**Plenipotentiary representatives of all JINR Member States attended the meeting of the CP sessions in person. The meeting was attended by representatives of the relevant ministries of Kazakhstan and Cuba, the IAEA & the Arab Atomic Energy Agency, Directorate of the Dubna city district and the Dubna State University.**



**At the beginning, Deputy Minister of Science, Technology & Environment of the Republic of Cuba Armando Rodriguez Batista announced the awarding of the title of Corresponding Member of the Academy of Sciences of the Republic of Cuba to the Scientific Leader of LNR Yuri Oganessian**



**Deputy DG of the IAEA Mikhail Chudakov conveyed greetings from the Agency's DG Rafael Mariano Grossi to the members of the CP. He noted the current wide cooperation & expected to expand cooperation & also invited JINR to take part in a number of events held by the agency in '24.**



**Minister-Counselor for Science & Technology Affairs of the Chinese Embassy in the Russian Federation Zhou Yu congratulated the Joint Institute for Nuclear Research on the 68th anniversary of its founding.**



# Session of the JINR CP

## AGENDA

1. *Report by the **JINR Director - G. Trubnikov***
2. *Execution of the **JINR** budget for **2023** & draft of the revised budget for **2024** - **N. Kalinin***
3. *Results of the meeting of the **JINR Finance Committee** held on **21 March '24** - **A. Omelchuk***
4. *Proposals for amending the **Rules** of procedure of the **Finance Committee** & the **Rules** of procedure of the **Committee of Plenipotentiaries of JINR** — **A. Kharevich***
5. *On the status of preparation and approval of the **List of JINR officials** - **A. Kharevich***
6. *On the decision of the **Republic of Moldova** to withdraw from **JINR** - **A. Khvedelidze***
7. *Amendments to the **Regulation** for the **election** of **Directors** & for the **endorsement** of appointment of **Deputy Directors** of **JINR Laboratories** - **S. Nedelko***





## Session of the CP



Having heard the report presented by **G. Trubnikov**, the **CP** took note of the recommendations of the **135th** session of the **SC**, the implementation of the **current 7-year plan** for the development of JINR, the efforts of the **Member States** towards realization of JINR's **large projects**, the new scientific & technological **results obtained**, & about the most important **events** on scientific research, **educational activities** and **international cooperation**.



The **CP** noted the high efficiency of the JINR's activities in intensifying & expanding scientific cooperation with partner organizations of JINR **MS & AM**, increasing the level of interaction with the **People's Republic of China**, the **United Mexican States**, the **Federative Republic of Brazil**, and the **Republic of India**.

The **CP** appreciated with satisfaction the progress in the current plan for research & development of the JINR scientific infrastructure, the successful participation in international collaborations, & achievements in strengthening international cooperation.



The **CP** took note the information on the transfer of the rights and obligations of the **general contractor** under the contract “Installation of the heavy ion collider NICA at the site of VBLHEP JINR in Dubna with a partial reconstruction of the building №1 of 18 Sept. 2015 to **TES LLC** from **1 March 2024**.

The **CP** supported the efforts of the Directorate to renew & develop the **social infrastructure** (the restaurant of the H&R Complex “Dubna”, the complex of buildings on the territory of the Resort Hotel “Ratmino”, the International Conference Centre) to support the program developing the institute’s HR in accordance with the **current 7-year plan**.

The **CP** supported the initiative of the JINR Directorate to create an **international innovation park of science & technology** in Dubna, including, the construction of a **modern university campus** and comprehensive development of the surrounding areas, together with technologically advanced partners from JINR Participating Countries and partner countries, the **SEZ “Dubna”**, regional and federal executive authorities, **Dubna State University**.

The **CP** expressed gratitude to the **IAEA** & the JINR Directorate for supporting the initiative to hold a 2-week internship at **JINR** within the framework of the **IAEA Lise Meitner Program**  
in agreement with the **IAEA**.

The **CP** endorsed JINR’s intensified participation in the International Decade of Basic Sciences for Sustainable Development (IDBSSD) under the auspices of **UNESCO** through JINR’s accession to the **Earth Charter**.



## Session of the JINR CP

The **CP** supported the efforts of the **JINR Directorate** in the development of international scientific and technical cooperation and the creation of an integrated scientific and technological space in the field of **neutron research at the unique neutron sources**,  
including research infrastructure of the “**megascience**” class.

The **CP** endorsed the accession of the **JINR** to the **Consortium** for the project to develop an **International Research Center based on the Multipurpose Fast Research Reactor (MBIR)** and to the **International Association “Interdisciplinary Center for Neutron Research PIK”** on conditions taking into account the special status of the Institute and the **7-Year Plan (2024–2030)**, as well as the interests of the **JINR Member States**.

The **CP** supported the initiative of the **JINR Directorate**  
to establish a **new scientific journal** published by **JINR**.

The **CP** congratulated the staff of the Institute on the **40th** anniversary of the commissioning of the **IBR-2** pulsed neutron source, support the initiative of the **JINR Directorate** & the **Frank Laboratory of Neutron Physics** on naming the **square** near the **IBR-2** reactor building  
at the **JINR DLNP Site** after **V. D. Ananyev**.




## Session of the JINR CP

The **CP** approved the revised budget of **JINR** for **2024** with the income amounting to **US\$ 214 124,5 k** and the expenditure amounting to **US\$ 286 818,2 k**, taking into account the positive opening balance amounting to **US\$ 56 749.0 k**, as well as the new forms of reports on the execution of the **JINR budget**.



The **CP** took note of the information about the contribution arrears to the **JINR budget** of the **states that left the JINR membership in 2022**.

The **CP** instructed the **JINR Directorate** and the **Working Group** under the **CP Chair for JINR Financial Issues** to develop an approach to determining the **annual contributions** of the **Member States**, taking into account the annual increase in the **JINR budget** by **5%** during the **7-Year Plan (2024–2030)** & the issue of **abolishing the Rule for the lower contributions** starting from **2025**, & submit their proposals for consideration at the meeting of the **Finance Committee** and the **CP session in November 2024**.



IBR-2 and spectrometers  
Multifunctional information and computing complex  
Other research projects

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## Session of the JINR CP



*The **CP** took note of the notification of the **Republic of Moldova** on its withdrawal from the JINR and instructed the **CP Chair** to notify the **Republic of Moldova** about maintaining its full membership in the JINR during **2024** and the entry into force of its withdrawal from JINR from **1 January 2025**.*

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*Having heard and discussed the report “**Amendments to the Regulation for the election of Directors and for the endorsement of appointment of Deputy Directors of JINR Laboratories**” presented by **S. Nedelko**, JINR Chief Scientific Secretary, the **CP** approved the **new edition of the Regulation**.*

A candidate  
deemed electe  
majority of the  
Council who t  
second term



Thank you

ЛАБОРАТОРИЯ ФИЗИКИ ВЫСОКИХ ЭНЕРГИЙ

НАУКА ОБЪЕДИНЯЕТ

