## 57th meeting of the PAC for Nuclear Physics

### **Report of Contributions**

Contribution ID: 1 Type: **not specified** 

#### 1. Opening of the meeting

Thursday 29 June 2023 09:30 (10 minutes)

**Presenter:** NESVIZHEVSKY, V.

Contribution ID: 2 Type: not specified

### 2. Implementation of the recommendations of the 56th PAC meeting

Thursday 29 June 2023 09:40 (20 minutes)

Presenter: NESVIZHEVSKY, V.

Contribution ID: 3 Type: **not specified** 

# 3. Information on the Resolution of the 133rd session of the JINR Scientific Council (February 2023) and on the decisions of the JINR Committee of Plenipotentiaries (March 2023)

Thursday 29 June 2023 10:00 (20 minutes)

**Presenter:** DMITRIEV, S.

Contribution ID: 4 Type: **not specified** 

### 4.1. Project "Low-energy nuclear dynamics and properties of nuclear systems"

Thursday 29 June 2023 10:20 (15 minutes)

Referees: D. Eremenko, M. Gaidarov, J. Lubián Ríos

Presenter: ANTONENKO, N.

Contribution ID: 5 Type: **not specified** 

### 4.2. Project "Microscopic models for exotic nuclei and nuclear astrophysics"

Thursday 29 June 2023 10:40 (10 minutes)

Referees: M. Gaidarov, Kevin Insik Hahn, J. Lubián Ríos

**Presenter:** DZHIOEV, A.

Contribution ID: 6 Type: **not specified** 

#### 4.3. Project "Quantum few-body systems"

Thursday 29 June 2023 10:55 (10 minutes)

Referees: D. Eremenko, M. Gaidarov, J. Lubián Ríos

**Presenter:** MOTOVILOV, A.

Contribution ID: 7 Type: **not specified** 

### 4.4. Project "Relativistic nuclear dynamics and nonlinear quantum processes"

Thursday 29 June 2023 11:10 (10 minutes)

Referees: D. Eremenko, M. Gaidarov, J. Lubián Ríos

**Presenter:** BONDARENKO, S.

Contribution ID: 8 Type: **not specified** 

## 5. Proposal for extending the theme "Synthesis and Properties of Superheavy Elements, the Structure of Nuclei at the Limits of Nucleon Stability"

Thursday 29 June 2023 11:45 (15 minutes)

Referees: D. Eremenko, V. Nesvizhevsky, E. Vardaci

Presenter: SIDORCHUK, S.

Contribution ID: 17 Type: not specified

### 15. Report on the project "BAIKAL-GVD" and proposal for its extension

Friday 30 June 2023 09:30 (20 minutes)

Referees: Kevin Insik Hahn, V. Nesvizhevsky, E. Vardaci

**Presenter:** BELOLAPTIKOV, I.

Contribution ID: 22 Type: not specified

### 16. Meeting of the PAC members with the JINR Directorate

Friday 30 June 2023 10:20 (20 minutes)

Session Classification: Closed session:

Contribution ID: 25 Type: not specified

#### 17. Drafting the PAC recommendations

Friday 30 June 2023 10:40 (1h 20m)

Session Classification: Closed session:

Contribution ID: 26 Type: not specified

#### 18. Proposals for the agenda of the next PAC meeting

Friday 30 June 2023 12:00 (1 hour)

Session Classification: Closed session:

Contribution ID: 27 Type: not specified

### 19. Presentation of the PAC recommendations to the directorates of JINR and the laboratories

Friday 30 June 2023 13:00 (40 minutes)

Contribution ID: 28 Type: not specified

#### 20. Closing of the meeting

Friday 30 June 2023 13:40 (5 minutes)

Contribution ID: 29 Type: not specified

## 4. Proposals for opening new projects within the theme "Theory of Nuclear Systems":

Thursday 29 June 2023 10:20 (1h 5m)

Contribution ID: 31 Type: not specified

# 5.1. Proposals for opening new projects within the theme "Synthesis and Properties of Superheavy Elements, the Structure of Nuclei at the Limits of Nucleon Stability"

Thursday 29 June 2023 12:05 (40 minutes)

Contribution ID: 36 Type: not specified

### 5.1.1. Project "Investigation of heavy and superheavy elements"

Thursday 29 June 2023 12:05 (15 minutes)

Referees: D. Eremenko, Qin Zhi, E. Vardaci

**Presenter:** KARPOV, A.

Contribution ID: 37 Type: not specified

### 5.1.2. Project "Light exotic nuclei at the borders of nuclear stability"

Thursday 29 June 2023 12:25 (15 minutes)

Referees: Guinyun Kim, J. Lubián Ríos, I. Mazumdar

**Presenter:** KAMINSKI, G.

Contribution ID: 39 Type: not specified

# 6. Report on the theme "Development of the FLNR Accelerator Complex and Experimental Setups (DRIBs-III)". Proposals for its reformation into a large research infrastructure project (LRIP)

Thursday 29 June 2023 14:00 (15 minutes)

Referees: Qin Zhi, E. Vardaci, Z. Vilakazi

Presenter: KALAGIN, I.

Contribution ID: 40

Type: not specified

## 6.1. Proposals for opening new projects within the LRIP "Development of the FLNR accelerator complex and experimental setups (DRIBs-III)"

Thursday 29 June 2023 14:20 (35 minutes)

Contribution ID: 41 Type: not specified

#### 6.1.1. Project "The U-400R accelerator complex"

Thursday 29 June 2023 14:20 (25 minutes)

Referees: D. Klinov, Qin Zhi, Z. Vilakazi

Presenter: EREMIN, A.

Contribution ID: 42 Type: not specified

## 6.1.2. Project "Development of experimental setups to study the chemical and physical properties of superheavy elements"

Thursday 29 June 2023 14:50 (5 minutes)

Referees: Guinyun Kim, Kevin Insik Hahn, Z. Vilakazi

Contribution ID: 43

Type: not specified

# 7. Report on the theme "Investigations of Neutron Nuclear Interactions and Properties of the Neutron" and on the projects "TANGRA", "ENGRIN" and "Modernization of EG-5". Proposals for extending the projects "TANGRA" and "Modernization of EG-5"

Thursday 29 June 2023 14:55 (20 minutes)

Referees: Guinyun Kim, I. Mazumdar, V. Nesvizhevsky

Presenter: KOPATCH, Yu.

Contribution ID: 44

Type: not specified

# 8. Proposals for opening a new theme "Nuclear Physics with Neutrons" and a new project "Investigations of neutron nuclear interactions and properties of the neutron"

Thursday 29 June 2023 15:20 (20 minutes)

Referees: Guinyun Kim, V. Kuzminov, V. Nesvizhevsky

**Presenter:** SHVETSOV, V.

Contribution ID: 45 Type: not specified

### 9. Proposal for extending the project "BECQUEREL 2023"

Thursday 29 June 2023 15:45 (10 minutes)

Referees: D. Klinov, V. Kuzminov, I. Mazumdar

**Presenter:** ZARUBIN, P.

Contribution ID: 46 Type: **not specified** 

### 10. Proposal for extending the project "E&T&RM" with the new title "ADSR"

Thursday 29 June 2023 16:20 (15 minutes)

Referees: Guinyun Kim, V. Kuzminov, Qin Zhi

Presenter: PARAIPAN, M.

Contribution ID: 47 Type: **not specified** 

## 11. Proposal for extending the project "Study of the nucleon spin structure in strong and electromagnetic interactions (GDH&SPASCHARM&NN)"

Thursday 29 June 2023 16:40 (15 minutes)

Referees: Kevin Insik Hahn, E. Vardaci, Z. Vilakazi

Presenter: PLIS, Yu.

Contribution ID: 48

Type: not specified

### 12. Proposal for opening a new project "Radiochemistry and spectroscopy for astrophysics and nuclear medicine"

Thursday 29 June 2023 17:00 (15 minutes)

Referees: Kevin Insik Hahn, I. Mazumdar, Qin Zhi

Presenter: BAIMUKHANOVA, A.

Contribution ID: 49 Type: not specified

### 13. Proposal for opening a new project "Short baseline reactor neutrino studies"

Thursday 29 June 2023 17:20 (15 minutes)

Referees: D. Klinov, V. Kuzminov, E. Vardaci

Presenter: ZHITNIKOV, I.

Contribution ID: 50 Type: not specified

## 14. Proposal for opening a new project "Nuclear spectrometry for the search and investigation of rare phenomena"

Thursday 29 June 2023 17:40 (15 minutes)

Referees: Kevin Insik Hahn, V. Kuzminov, Z. Vilakazi

Presenter: YAKUSHEV, E.