

# **57th meeting of the PAC for Condensed Matter Physics**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## 1. Opening of the meeting

*Thursday 15 June 2023 09:30 (10 minutes)*

**Presenter:** NAGY, D. L.

Contribution ID: 2

Type: **not specified**

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

*Thursday 15 June 2023 09:40 (15 minutes)*

**Presenter:** NAGY, D. L.

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 Committee of Plenipotentiaries of the Governments of the JINR Member States (March 2023)**

*Thursday 15 June 2023 09:55 (25 minutes)*

**Presenter:** KOSTOV, L.

Contribution ID: 17

Type: **not specified**

## **5. Meeting of the PAC members with the JINR Directorate**

*Friday 16 June 2023 10:00 (1 hour)*

Contribution ID: **18**

Type: **not specified**

## **6. Scientific report "Neutron-diffraction studies of structural phase transition in alloys"**

*Friday 16 June 2023 11:00 (25 minutes)*

**Presenter:** VERSHININA, T.

Contribution ID: **19**

Type: **not specified**

## **7. Virtual presentations by young scientists**

*Friday 16 June 2023 11:30 (1h 30m)*

Contribution ID: 20

Type: **not specified**

## **8. Voting and selection of the best virtual presentations**

*Friday 16 June 2023 13:00 (20 minutes)*



Contribution ID: 21

Type: **not specified**

## **9. Preparation of the PAC recommendations including proposals for the next PAC meeting**

*Friday 16 June 2023 13:40 (30 minutes)*

**Session Classification:** Closed session

Contribution ID: 22

Type: **not specified**

## 10. Closing of the meeting

*Friday 16 June 2023 14:10 (5 minutes)*

Contribution ID: 24

Type: **not specified**

## **4.1. Proposal for opening the new large infrastructure project "Pulsed neutron source and spectrometers"**

*Thursday 15 June 2023 10:20 (10 minutes)*

**Presenter:** LYCHAGIN, E.

**Session Classification:** 4. Reports on projects:

Contribution ID: 25

Type: **not specified**

### **4.1.1. Proposal for opening the subproject "Development of the IBR-2 facility with a complex of cryogenic neutron moderators"**

*Thursday 15 June 2023 10:30 (20 minutes)*

Referees: D. Sangaa, D. Tayurskii

**Presenter:** LYCHAGIN, E.

**Session Classification:** 4. Reports on projects:

Contribution ID: 26

Type: **not specified**

## **4.1.2. Proposal for opening the subproject "The new advanced neutron source at JINR"**

*Thursday 15 June 2023 10:55 (20 minutes)*

Referees: P. Alekseev, D. Khmel'nitsky

**Presenter:** BULAVIN, M.

**Session Classification:** 4. Reports on projects:

Contribution ID: 27

Type: **not specified**

### **4.1.3. Proposals for opening the subproject "Scientific and methodological research and developments for condensed matter investigations with IBR-2 neutron beams"**

*Thursday 15 June 2023 11:35 (20 minutes)*

Referees: E. Kravtsov, M. Tashmetov

**Presenter:** BODNARCHUK, V.

**Session Classification:** 4. Reports on projects:

Contribution ID: 28

Type: **not specified**

## **4.1.4. Proposal for opening the subproject "Investigations of functional materials and nanosystems using neutron scattering"**

*Thursday 15 June 2023 12:00 (20 minutes)*

Referees: A. Kuzmin, K. Podurets

**Presenter:** KOZLENKO, D.

**Session Classification:** 4. Reports on projects:

Contribution ID: 29

Type: **not specified**

## 4.2. Proposal for opening the new project "Nanobiophotonics"

*Thursday 15 June 2023 12:25 (20 minutes)*

Referees: V. Borisenko, N. Verga

**Presenter:** ARZUMANYAN, G.

**Session Classification:** 4. Reports on projects:



Contribution ID: 30

Type: **not specified**

### **4.3. Proposal for extending the project "Novel semiconductor detectors for fundamental and applied research"**

*Thursday 15 June 2023 12:50 (20 minutes)*

Referees: A. Vorobiev, A. Kuzmin

**Presenter:** SHELKOV, G.

**Session Classification:** 4. Reports on projects:

Contribution ID: 31

Type: **not specified**

## **4.4. Proposal for extending the project "Precision laser metrology for accelerators and detector complexes (PLI)"**

*Thursday 15 June 2023 13:15 (20 minutes)*

Referees: H. Fuess, V. Nikitin

**Presenter:** LYABLIN, M.

**Session Classification:** 4. Reports on projects:

Contribution ID: 32

Type: **not specified**

## **4.5. Proposal for extending the project "Development of experimental techniques and applied research with slow monochromatic positron beams (PAS)"**

*Thursday 15 June 2023 15:00 (20 minutes)*

Referees: M. Eseev, D. L. Nagy

**Presenter:** SIDORIN, A.

**Session Classification:** 4. Reports on projects:

Contribution ID: 33

Type: **not specified**

## **4.6. Proposal for opening the project "Design and development of a test zone for methodological studies of detectors at the linear electron accelerator in DLNP"**

*Thursday 15 June 2023 15:25 (20 minutes)*

Referees: A. Baldin, D. Sangaa

**Presenter:** ABOU EL-AZM, S.

**Session Classification:** 4. Reports on projects:

Contribution ID: 34

Type: **not specified**

## **4.7. Proposal for opening the project "Protection against physical and chemical stresses with tardigrade proteins (TARDISS)"**

*Thursday 15 June 2023 16:05 (20 minutes)*

Referees: A. Bucharskaya, R. Saladino

**Presenter:** ZARUBIN, M.

**Session Classification:** 4. Reports on projects:

Contribution ID: 35

Type: **not specified**

## **4.8. Proposal for opening the project "Molecular, genetic and organismal effects of ionizing radiation with different physical characteristics"**

*Thursday 15 June 2023 16:30 (20 minutes)*

Referees: N. Verga, I. Ushakov

**Presenter:** LOBACHEVSKY, P.

**Session Classification:** 4. Reports on projects:

Contribution ID: 36

Type: **not specified**

## **4.9. Proposal for opening the project "Radiation biophysics and astrobiology research"**

*Thursday 15 June 2023 16:55 (20 minutes)*

Referees: L. Avramov, R. Saladino

**Presenter:** CHIZHOV, A.

**Session Classification:** 4. Reports on projects:

Contribution ID: 37

Type: **not specified**

## **4.10. Proposal for opening the projects "Radiation tolerance of materials to high intensity heavy ion beams impact" and "Nanocomposite and functional track-etched membranes"**

*Thursday 15 June 2023 17:20 (20 minutes)*

Referees: P. Alekseev, A. Kuzmin, V. Nikonenko, V. Uglov

**Presenter:** APEL, P.

**Session Classification:** 4. Reports on projects:



Contribution ID: 38

Type: **not specified**

**4.11. Consideration of written proposals for opening or extending the projects "Methods of computational physics for the study of complex systems", "Complex materials", "Mathematical models of statistical physics of complex systems", "Nanostructures and nanomaterials", "Quantum field theory methods in complex systems"**

*Thursday 15 June 2023 17:45 (20 minutes)*

**Presenters:** NAGY, D. L.; BELOV, O.

**Session Classification:** 4. Reports on projects: