

# RuPAC-2021



## Report of Contributions

Contribution ID: 1

Type: **not specified**

# **Development of Physics and Technology of Particle Accelerators for Basic Science and Applications**

*Monday, 27 September 2021 10:00 (25 minutes)*

**Presenter:** SHARKOV, Boris (JINR, Dubna)

Contribution ID: 2

Type: **not specified**

## **Development and Implementation of Bunch Shape Instrumentation for Ion Linacs**

*Monday, 27 September 2021 10:25 (30 minutes)*

**Presenter:** GAVRILOV, Sergei (INR RAS, Moscow)

Contribution ID: 3

Type: **not specified**

# **LHC, ILC and ERLC: a High-Luminosity Superconducting Twin $e^+e^-$ Linear Collider With Energy Recovery and Multiple Use of Beams**

*Monday, 27 September 2021 11:15 (30 minutes)*

**Presenter:** TELNOV, Valery (BINP SB RAS, Novosibirsk)

Contribution ID: 4

Type: **not specified**

## **The NICA Complex Injection Facility**

*Monday, 27 September 2021 11:45 (30 minutes)*

**Presenter:** BUTENKO, Andrey (JINR, Dubna)

Contribution ID: 5

Type: **not specified**

## **NICA Ion Collider at JINR**

*Monday, 27 September 2021 12:15 (30 minutes)*

**Presenter:** SYRESIN, Evgeny (JINR, Dubna)

Contribution ID: 6

Type: **not specified**

## **Linear Ion Accelerators for Physics and Industry**

*Monday, 27 September 2021 12:45 (30 minutes)*

**Presenter:** KULEVOY, Timur (NRC KI-ITEP/MEPhI, Moscow)

Contribution ID: 7

Type: **not specified**

## **Neutron Field Measurements by GFPC Based Monitors at the Carbon Beam of IHEP U-70 Proton Synchrotron**

*Monday, 27 September 2021 13:15 (20 minutes)*

**Presenter:** SUMANEEV, Oleg (NRC KI-IHEP, Protvino)



Contribution ID: 8

Type: **not specified**

## **Status of the Novosibirsk Fourth-Generation Light Source SKIF**

*Monday, 27 September 2021 15:00 (30 minutes)*

**Presenter:** BOGOMYAGKOV, Anton (BINP SB RAS, Novosibirsk)

Contribution ID: 9

Type: **not specified**

## **Linear Induction Accelerator LIA-2 Upgrade**

*Monday, 27 September 2021 15:30 (30 minutes)*

**Presenter:** STAROSTENKO, Dmitriy (BINP SB RAS, Novosibirsk)

Contribution ID: 10

Type: **not specified**

## **Beam dynamics challenge in Novosibirsk Super C-Tau Factory**

*Monday, 27 September 2021 16:00 (20 minutes)*

**Presenter:** BOGOMYAGKOV, Anton (BINP SB RAS, Novosibirsk)

Contribution ID: **11**

Type: **not specified**

## **Status of U-70**

*Monday, 27 September 2021 16:20 (20 minutes)*

**Presenter:** KALININ, Vladimir (NRC KI-IHEP, Protvino)

Contribution ID: 12

Type: **not specified**

## **Linear electron accelerator LINAC-200, status of work and prospects**

*Monday, 27 September 2021 16:40 (20 minutes)*

**Presenter:** KOBETS, Valeriy (JINR, Dubna)

Contribution ID: 13

Type: **not specified**

## **Accelerator Physics and Education: MEPHI Experience and Problems**

*Monday, 27 September 2021 20:00 (20 minutes)*

**Presenter:** POLOZOV, Sergey (MEPhI, Moscow)

Contribution ID: 14

Type: **not specified**

## **Status of the HIAF Accelerator Facility in China**

*Tuesday, 28 September 2021 09:30 (30 minutes)*

**Presenter:** MAO, Lijun (IMP/CAS, Lanzhou, China)

Contribution ID: 15

Type: **not specified**

## **VEPP-2000 collider operation in 2019-2021 runs: challenges and results**

*Tuesday, 28 September 2021 10:00 (30 minutes)*

**Presenter:** TIMOSHENKO, Maksim (BINP SB RAS, Novosibirsk)



Contribution ID: 16

Type: **not specified**

## **VEPP-4M Electron Positron Collider Operation at High Energy**

*Tuesday, 28 September 2021 10:30 (20 minutes)*

**Presenter:** PIMINOV, Pavel (BINP SB RAS, Novosibirsk)

Contribution ID: 17

Type: **not specified**

## Status of VEPP-5 Injection Complex

*Tuesday, 28 September 2021 11:10 (20 minutes)*

**Presenter:** MALTSEVA, Yuliya (BINP SB RAS, Novosibirsk)

Contribution ID: **18**

Type: **not specified**

## **Ion Beam dynamics in NICA Collider**

*Tuesday, 28 September 2021 11:30 (30 minutes)*

**Presenter:** KOSTROMIN, Sergei (JINR, Dubna)

Contribution ID: 19

Type: **not specified**

## **Beam Transfer Systems of NICA Facility**

*Wednesday, 29 September 2021 09:30 (20 minutes)*

**Presenter:** TUZIKOV, Alexey (JINR, Dubna)

Contribution ID: 20

Type: **not specified**

# **Acceleration of Carbon and Helium Beams by the Heavy Ion Linear Accelerator for Its Commissioning and First Run of Booster Synchrotron of the NICA Accelerating Facility**

*Wednesday, 29 September 2021 09:50 (20 minutes)*

**Presenter:** LEVTEROV, Konstantin (JINR, Dubna)

Contribution ID: 21

Type: **not specified**

## **200 MeV linac development for the SKIF light source injector**

*Wednesday, 29 September 2021 10:10 (20 minutes)*

**Presenter:** ARSENTYEVA, Mariya (BINP SB RAS, Novosibirsk)

Contribution ID: 22

Type: **not specified**

## **SC Magnets for Project of NICA**

*Wednesday, 29 September 2021 10:30 (20 minutes)*

**Presenter:** NIKIFOROV, Dmitry (JINR, Dubna)

Contribution ID: 23

Type: **not specified**

## **Magnetic Field Measurements for the NICA Collider Magnets and FAIR Quadrupole Units**

*Wednesday, 29 September 2021 10:50 (20 minutes)*

**Presenter:** SHEMCHUK, Andrey (JINR, Dubna)



Contribution ID: 24

Type: **not specified**

# **First Experience of Production and Testing the Superconducting Quadrupole and Corrector Magnets for the SIS100 Heavy Ion Accelerator of FAIR**

*Wednesday, 29 September 2021 11:30 (20 minutes)*

**Presenter:** FISCHER, Egbert (JINR, Dubna)

Contribution ID: 25

Type: **not specified**

## **MPD Yoke assembly**

*Wednesday, 29 September 2021 11:50 (20 minutes)*

**Presenter:** TOPILIN, Nikolay (JINR, Dubna)

Contribution ID: 26

Type: **not specified**

## **Features of Power Supply Systems for Superconducting Structural Magnets of NICA Accelerators**

*Wednesday, 29 September 2021 12:10 (20 minutes)*

**Presenter:** KARPINSKII, Victor (JINR, Dubna)

Contribution ID: 27

Type: **not specified**

## **Features of Reaching the Operating Vacuum in the Accelerators of the NICA Project**

*Wednesday, 29 September 2021 12:30 (20 minutes)*

**Presenter:** GALIMOV, Artem (JINR, Dubna)

Contribution ID: 28

Type: **not specified**

## **Modern decisions for vacuum accelerator systems**

*Wednesday, 29 September 2021 12:50 (20 minutes)*

**Presenters:** LOVTSYUS, Dmitry ("Intech Analytics" Co., St. Petersburg); MOISEEV, Konstantin ("Intech Analytics" Co., St. Petersburg)

Contribution ID: 29

Type: **not specified**

# Beam Diagnostics for the SKIF Synchrotron Light Source

*Wednesday, 29 September 2021 13:10 (20 minutes)*

**Presenter:** ARSENTYEVA, Mariya (BINP SB RAS, Novosibirsk)

Contribution ID: 30

Type: **not specified**

## **Measurement of the SKIF transverse beam size with sub-micron resolution based on optical beam diagnostics experience at Kurchatov SLS**

*Wednesday, 29 September 2021 13:30 (10 minutes)*

**Presenter:** ARSENTYEVA, Mariya (BINP SB RAS, Novosibirsk)

Contribution ID: 31

Type: **not specified**

## **Precise analysis of beam optics in VEPP-4M by turn-by-turn betatron phase advance measurement**

*Wednesday, 29 September 2021 13:40 (20 minutes)*

**Presenter:** MOROZOV, Ivan (BINP SB RAS, Novosibirsk)



Contribution ID: 32

Type: **not specified**

# **Nondestructive Diagnostics of Accelerated Ion Beams With MCP-Based Detectors at the Accelerator Complex NICA. Experimental Results and Prospects**

*Wednesday, 29 September 2021 15:30 (20 minutes)*

**Presenter:** BALDIN, Anton (JINR, Dubna)

Contribution ID: 33

Type: **not specified**

## **Beam Position Monitoring Challenges and Techniques for Recent and Future Lightsources**

*Wednesday, 29 September 2021 15:50 (20 minutes)*

**Presenter:** JANEZIC, Elvis (I-Tech, Solkan, Slovenia)

Contribution ID: 34

Type: **not specified**

## **Smith-Purcell radiation in prewave zone for diagnostics of relativistic electron beams**

*Wednesday, 29 September 2021 16:10 (20 minutes)*

**Presenter:** GARAEV, Damir (MEPhI, Moscow)

Contribution ID: 35

Type: **not specified**

# **Joint Institute for Nuclear Research: International Intergovernmental Research Organization**

*Wednesday, 29 September 2021 20:00 (30 minutes)*

**Presenter:** KAMANIN, Dmitry (JINR, Dubna)

Contribution ID: 36

Type: **not specified**

## **Improving Scientific Presentations**

*Wednesday, 29 September 2021 20:30 (20 minutes)*

**Presenter:** BOGOMYAGKOVA, Holly (Physics Faculty, Novosibirsk State University)

Contribution ID: 37

Type: **not specified**

## **Status of the SC Half Wave Resonator Cavities Production for NICA Project**

*Thursday, 30 September 2021 09:30 (20 minutes)*

**Presenter:** GUSAROVA, Maria (MEPhI, Moscow)

Contribution ID: 38

Type: **not specified**

## **Precise Generation and Distribution System of RF Reference Signal for SKIF Accelerator Complex**

*Thursday, 30 September 2021 09:50 (20 minutes)*

**Presenter:** CARGNELUTTI, Manuel (I-Tech, Solkan, Slovenia)

Contribution ID: 39

Type: **not specified**

## **E. D. Donets: 50 years with EBIS/ESIS**

*Thursday, 30 September 2021 10:10 (50 minutes)*

**Presenter:** DONETS, Evgeny (JINR, Dubna)



Contribution ID: 40

Type: **not specified**

## **Beam Formation from Radionuclide Positron Source by the Charged Particles Beams Stochastic Optics Method**

*Thursday, 30 September 2021 11:20 (20 minutes)*

**Presenter:** KURAKIN, Vyacheslav (LPI, Moscow)

Contribution ID: 41

Type: **not specified**

# **A High Current Pure Proton Beam Source Prototype**

*Thursday, 30 September 2021 11:40 (20 minutes)*

**Presenter:** SKALYGA, Vadim (IAP RAS, Nizhny Novgorod)

Contribution ID: 42

Type: **not specified**

# **Numerical Simulations of Space Charge Dominated Beam Dynamics in Experimentally Optimized PITZ RF Photogun**

*Thursday, 30 September 2021 12:00 (20 minutes)*

**Presenter:** POLOZOV, Sergey (MEPhI, Moscow)

Contribution ID: 43

Type: **not specified**

## **Beam Correction System of the NICA Collider**

*Thursday, 30 September 2021 12:20 (20 minutes)*

**Presenter:** SHANDOV, Mikhail (JINR, Dubna)

Contribution ID: 44

Type: **not specified**

# **Methods and Systematic Errors for Searching for the Electric Dipole Moment of Charged Particle Using a Storage Ring**

*Thursday, 30 September 2021 12:40 (20 minutes)*

**Presenter:** SENICHEV, Yury (INR RAS, Moscow)

Contribution ID: 45

Type: **not specified**

## **Development of the Electron Cooling System for NICA Collider**

*Thursday, 30 September 2021 13:00 (20 minutes)*

**Presenter:** BRYZGUNOV, Maxim (BINP SB RAS, Novosibirsk)

Contribution ID: 46

Type: **not specified**

## **Stochastic Cooling System of the NICA Collider: Designing and Modeling**

*Thursday, 30 September 2021 13:20 (20 minutes)*

**Presenter:** GORELYSHEV, Ivan (JINR, Dubna)

Contribution ID: 47

Type: **not specified**

## The Conceptual Design of the 7.5 MeV/u Light Ion Injector

*Thursday, 30 September 2021 13:40 (20 minutes)*

**Presenter:** POLOZOV, Sergey (MEPhI, Moscow)



Contribution ID: 48

Type: **not specified**

## **Status of the Kurchatov Synchrotron Radiation Source**

*Thursday, 30 September 2021 15:30 (20 minutes)*

**Presenter:** VALENTINOV, Alexander (NRC KI, Moscow)

Contribution ID: 49

Type: **not specified**

# Concept of a New Kurchatov Synchrotron Radiation Source

*Thursday, 30 September 2021 15:50 (20 minutes)*

**Presenter:** KORCHUGANOV, Vladimir (NRC KI, Moscow)

Contribution ID: 50

Type: **not specified**

# **Development of Powerful Long-Pulse THz-Band FEL Driven by Linear Induction Accelerator**

*Thursday, 30 September 2021 16:10 (20 minutes)*

**Presenter:** PESKOV, Nikolay (IAP RAS, Nizhny Novgorod)

Contribution ID: 51

Type: **not specified**

## **Peculiarities of Producing $^{48}\text{Ca}$ , $^{48}\text{Ti}$ , $^{52}\text{Cr}$ Beams at the DC-280 Cyclotron**

*Friday, 1 October 2021 09:30 (20 minutes)*

**Presenter:** GIKAL, Kirill (JINR, Dubna)

Contribution ID: 52

Type: **not specified**

## **Cyclotron of Multi-Charge Ions**

*Friday, 1 October 2021 09:50 (20 minutes)*

**Presenter:** OSINA, Yulia (NIIIEFA, St. Petersburg)

Contribution ID: 53

Type: **not specified**

## **Simulation and Design of the Permanent Magnet Multipole for DC140**

*Friday, 1 October 2021 10:10 (20 minutes)*

**Presenter:** KUKHTIN, Vladimir (NIEFA, St. Petersburg)

Contribution ID: 54

Type: **not specified**

# The Experimental Research of Cyclotron DC-280 Beam Parameters

*Friday, 1 October 2021 10:30 (20 minutes)*

**Presenter:** SEMIN, Vasiliy (JINR, Dubna)

Contribution ID: 55

Type: **not specified**

## **Cyclotron System C-250**

*Friday, 1 October 2021 10:50 (20 minutes)*

**Presenter:** SMIRNOV, Kirill (NIEFA, St. Petersburg)



Contribution ID: 56

Type: **not specified**

## **Advances in the development of a Vacuum Insulated Tandem Accelerator and its applications**

*Friday, 1 October 2021 11:30 (20 minutes)*

**Presenter:** TASKAEV, Sergey (BINP SB RAS, Novosibirsk)

Contribution ID: 57

Type: **not specified**

## **Accelerators of ELV Series: Current Status and Further Development**

*Friday, 1 October 2021 11:50 (20 minutes)*

**Presenter:** DOMAROV, Evgeny (BINP SB RAS, Novosibirsk)

Contribution ID: 58

Type: **not specified**

## **Upgraded the Extraction Device of Focused Electron Beam Into the Atmosphere**

*Friday, 1 October 2021 12:10 (20 minutes)*

**Presenter:** DOMAROV, Evgeny (BINP SB RAS, Novosibirsk)

Contribution ID: 59

Type: **not specified**

## **A linear accelerator for proton therapy**

*Friday, 1 October 2021 12:30 (20 minutes)*

**Presenter:** PARAMONOV, Valentin (INR RAS, Moscow)

Contribution ID: **60**

Type: **not specified**

## **Updated Status of Protom synchrotrons for Proton Therapy**

*Friday, 1 October 2021 12:50 (20 minutes)*

**Presenter:** PRYANICHNIKOV, Alexander (PhTC LPI RAS, Protvino)

Contribution ID: 61

Type: **not specified**

## **The Results Obtained on "Radiobiological Stand" Facility, Working With the Extracted Carbon Ion Beam of the U-70 Accelerator**

*Friday, 1 October 2021 13:10 (20 minutes)*

**Presenter:** PIKALOV, Vladimir (NRC KI-IHEP, Protvino)

Contribution ID: 62

Type: **not specified**

## **Transmission Studies With Ion Beams Within FAMA**

*Friday, 1 October 2021 13:30 (20 minutes)*

**Presenter:** JOVANOVIC, Zoran (VINCA, Belgrade, Serbia)

Contribution ID: 63

Type: **not specified**

## **Superheavy Elements: Present & Future**

*Friday, 1 October 2021 15:00 (20 minutes)*

**Presenter:** ITKIS, Mikhail (JINR, Dubna)