

Session Program

Oct 11 - 17, 2020

**LXX International conference "NUCLEUS -
2020. Nuclear physics and elementary
particle physics. Nuclear physics
technologies"**

***Section 3. Modern nuclear physics methods
and technologies***

Online

Tue, October 13

2:40 PM

Section 3. Modern nuclear physics methods and technologies

Session | Location: Online

14:40 - 15:05

Silicon pixel detectors for the Inner Tracking System of MPD experiment at the NICA collider

Speaker

Dr Vladimir Zherebchevsky

15:05 - 15:30

Application of BM@N Si-microstrip detectors at muon stand for testing straw detectors

Speaker

Mr Bogdan Topko

15:30 - 15:55

The development of Silicon beam tracker and beam profilometer at the BM@N experiment

Speaker

Ms Yulia Ivanova

15:55 - 16:20

Global tracking in the BM@N experiment

Speaker

Sergei Merts

16:20 - 16:35

Coffee break

16:35 - 17:00

High-performance optimization of event simulation and track reconstruction software in the BM@N NICA experiment

Speaker

Prof. Sergei Nemnyugin

17:00 - 17:25

Status of the BM@N STS module assembly

Speaker

Aleksei Sheremetev

17:25 - 17:50

Silicon Tracking System as a Part of Hybrid Tracker of BM@N Experiment

Speaker

Dmitrii Dementev

17:50 - 18:15

Cooling systems for the novel pixel detectors

Speaker

Dmitrii Nesterov

6:15 PM

Thu, October 15

2:30 PM

Section 3. Modern nuclear physics methods and technologies

Session | Location: Online

14:30 - 14:55

CLAS Physics Data Base for the Physics Analysis of the Experiments with Electromagnetic Probes.

Speaker

Vitaly Chesnokov

14:55 - 15:20

FEATURES OF NICKEL-63 LARGESCALE PRODUCTION WITH NUCLEAR POWER PLANT

Speaker

V.A. Mazgunova

15:20 - 15:45

THE DEPENDENCE OF SPATIAL LOCATION AND SIZE OF NEUTRON FLUX ON THE MAXIMUM NEUTRON ENERGY

Speaker

Dr Igor Meshkov

15:45 - 16:10

Combined spectrometer for measuring the spectra of prompt fission neutrons in a wide energy range.

Speaker

Mr Pavel Prusachenko

16:10 - 16:25

Coffee break

16:25 - 16:50

On the possibility of control the maximum energy of fast neutrons by the pulse height spectra of the ^{10}B -detector

Speaker

Stanislav Potashev

16:50 - 17:15

Efficiency and energy resolution calculation under developing of fast neutron detector with boron-10 converter

Speaker

Aleksandr Kasparov

17:15 - 17:40

Prospects for plasma excitation of ^{186}mRe nuclear isomer

Speaker

Vladimir Koltsov

5:40 PM

Fri, October 16

3:15 PM

Section 3. Modern nuclear physics methods and technologies

Session | Location: Online

15:15 – 15:40 **No contributions**

15:40 – 16:05

STATUS OF THE PITRAP PROJECT – THE PENNING TRAP AT THE REACTOR PIK

Speaker

Prof. Yuri Novikov

16:05 – 16:30

A COMPARATIVE STUDY ON THE GAS-JET TRANSPORTATION METHOD FOR NUCLEAR SPECTROSCOPY MEASUREMENTS

Speaker

Dimitar Simonovski

16:30 – 16:55

HYBRID ION TRAP: FIRST APPROACH

Speaker

Ms Olesia Bezrodnova

16:55 – 17:10

Coffee break

17:10 – 17:35

Ion-guide system for the GALS set-up

Speaker

Viktor Zhemenik

17:35 – 18:00

CARBON NANOMATERIALS APPLICATION FOR ISOL-METHOD OF HEAVY ION FUSION REACTION PRODUCTS

Speaker

Mr Viacheslav Yurievich Vedeneev

18:00 – 18:25

METHOD OF ANALYSIS OF LARGE ARRAYS OF DISCRETE EMPIRICAL DISTRIBUTIONS OF COUNTS WITH A SMALL SAMPLE NUMBER

Speaker

Victor Vakhtel

18:25 – 18:50

PRODUCTION OF IONIZING RADIATION SOURCE OF IRIIDIUM-192 FOR NDT

Speaker

U.T. Ashrapov

18:50 – 19:10

Studying neutron spectrum of photoneutron source of INR RAS

Speaker

Aleksey Afonin

7:10 PM

Sat, October 17

9:00 AM

Section 3. Modern nuclear physics methods and technologies

Session | Location: Online

09:00 – 09:25

CHARACTERISTICS OF SMALL-SIZED SPECTROMETERS BASED ON CdZnTe FOR NUCLEAR PHYSICS RESEARCH

Speaker

Dr Александр Смирнов

09:25 – 09:50

Investigation of the dependence of the time resolution of Si detectors on the bias voltage

Speaker

Michael Mordovskoy

09:50 – 10:15

STANDARD THEORY of SCINTILLATION SPECTROMETERS with ONE PHOTODETECTOR

Speaker

Prof. Victor Samedov

10:15 – 10:40

Registration efficiency of a stilbene based neutron detector

Speaker

Ms Elvira Gazeeva

10:40 – 11:00

Coffee break

11:00 – 11:25

Possibilities of Using CdZnTe and CeBr₃ Crystals for Measuring Photon Radiation in a Wide Range of Energy

Speaker

Aleksei Shakhov

11:25 – 11:50

The Fast Interaction Trigger for ALICE LHC Run 3 and 4

Speaker

Maciej Slupecki

11:50 – 12:15

Effects of Electron Beam Application on Microbiological and Organoleptic Parameters of Chilled Turkey

Speaker

Mr Valery Leontev

12:15 – 12:40

Low-energy electron linacs for phytosanitary processing of agricultural products

Speaker

Valery Leontev

12:40 - 12:45

Estimation of masses of radioactive elements in geological samples using R programming language and ROOT libraries**Speaker**

Vasiliy Molchanovskiy

1:50 PM

12:50 - 13:50

Lunch break

2:10 PM

Section 3. Modern nuclear physics methods and technologies

Session | Location: Online

14:10 - 14:35

Production of the ^{186m}Re isomer in nuclear reactor**Speaker**

Vladimir Koltsov

14:35 - 15:00

Production of the $^{178m2}\text{Hf}$ isomer in nuclear reactor**Speaker**

Vladimir Koltsov

15:00 - 15:20

Modern methods for studying "hot" particles of various origin**Speaker**

Dr Marina Zheltonozhskaya

15:20 - 15:40

Studying a possibility of neutron-activation determination of rhenium content in radioactive rocks**Speaker**

Sergei Zuyev

15:40 - 16:00

TUNING THE NEET PROBABILITY**Speakers**

Prof. Feodor Karpeshin, Dr Malvina Trzhaskovskaya

16:00 - 16:20

NUCLEI PRODUCED FROM ^{238}U IRRADIATED BY SECONDARY GAMMA INITIATED BY ELECTRON BEAM (E = 140 MeV).**Speaker**

Mr Игорь Крячко

4:45 PM