

Session Program

12-24 Aug 2018



XIV-th International School-Conference "Actual Problems of Microworld Physics"

Talks

Belarus, Grodno region
Sanatorium "Ozerny", 231753, Grodno region, p/o Ozery, Belarus Hotel website: [http://ozerny.by/
glavnaya_en/](http://ozerny.by/glavnaya_en/)

Thursday 16 August

16:00

Talks

Session |

Location: Belarus, Grodno region, Sanatorium "Ozerny", 231753, Grodno region, p/o Ozery, Belarus Hotel website: http://ozerny.by/glavnaya_en/

16:00–16:35

Neutronics of ADS: YALINA Facility

Speaker

Anna Kievitskaya

16:35–17:10

New concept of ADS with light ions

Speaker

Anton Baldine

17:10–17:30

Emitters decay for thermal reactor within particles birth and death model

Speaker

Maksim Kravchenko

17:30–18:00

The COMET Level-1 Calorimeter trigger

Speaker

Dzmitry Shoukavy

18:00–18:30

Fast numerical scheme with GPGPU usage for Uehling-Uhlenbeck equation treatment

Speaker

Ivan Siutsou

19:00

Friday 17 August

14:00

Talks

Session |

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14:00–14:45

The structure and evolution of the Universe. Illusion or understanding?

Speakers

Oleg Boyarkin, Galina Boyarkina

14:45–15:15

Maxwell's principle of positive-definite energy density and the failure of vector gravity

Speaker

Anatoly Serdyukov

15:15–15:30

Gravitational nature of the dark energy and cosmological redshift in non-expanding universe and their cyclic history

Speaker

Maria Serdyukova

15:30–15:50

Break

15:50–16:35

The decays processes of the Higgs and Z bosons with lepton flavor violation

Speakers

Oleg Boyarkin, Galina Boyarkina

16:35–17:20

Application of Bardin-Shumeiko approach for estimating radiative effects in lepton-nucleon scattering

Speaker

Alexander Ilyichev

17:20–17:50

Analytical model of a many-electron atom

Speaker

Aliaksandr Leonau

17:50–18:20

Feasibility study of direct photon production process at FAIR energy

Speaker

Anna Skachkova

18:40

Monday 20 August

14:00

Talks

Session |

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14:00–14:30

High-precision methods for Coulomb, linear confinement and Cornell potentials in momentum space

Speaker

Victor Andreev

14:30–15:00

Collective emission in Dirac structures

Speaker

Konstantin Batrakov

15:00–15:30

Relativistically Invariant Self-Similarity Approach for Description of Collective Phenomena

Speaker

Elina Baldina

15:30–15:50

Break

15:50–16:25

Electrophysical response of Langmuir-Blodgett thin films from carbon-nanotubes decorated by organometallic-compound to ionizing low-energy gamma irradiation

Speaker

Halina Krylova

16:25–16:50

A new nanoporous material based on SiO₂/Si

Speaker

Aliya Alzhanova

16:50

Tuesday 21 August

14:00

Talks

Session |

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14:00–14:30

NLO and FSR NNLO radiative corrections for Drell-Yan processes at LHC

Speaker

Vladimir Zykunov

14:30–15:00

Investigation of Drell-Yan processes with the CMS detector at the LHC

Speaker

Vladislav Shalaev

15:00–15:30

Contribution of hard photon emission to charge asymmetry in elastic lepton-proton scattering

Speaker

Alexander Ilyichev

15:30–16:00

Break

16:00–16:30

Search for BSM effects in background photon collisions at future linear collider

Speaker

Vladimir Makarenko

16:30–16:55

Monte-Carlo event generator LPPG

Speaker

Vitaly Yermolchik

16:55–17:15

The two-photon production W bosons pair at colliders at the leading and the next-to-leading order

Speaker

Andrej Manko

17:15–17:45

Deep recurrent networks for searching particle tracks in 3D detector's space

Speaker

Pavel Goncharov

18:40

Wednesday 22 August

14:00

Talks

Session |

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14:00–14:40 **TBA**

Speaker

Alexander Lobko

14:40–15:20

On the deflection of charged particles in oriented crystals accompanied by radiation

Speaker

Alexei Sytov

15:20–15:40

The features of electromagnetic shower development in oriented crystals

Speaker

Viktar Haurylavets

15:40–16:00 **Break**

16:00–16:25 **TBA**

Speaker

Leonid Babichev

16:25–16:45

Experimental study of fission and capture reaction rates over the volume of massive uranium target under relativistic p, d and ^{12}C irradiation

Speaker

Alina Zhadan

16:45–17:15

Information tool for preservation, access and retrieval of nuclear knowledge in the frame of portal BeINET

Speaker

Svetlana Sytova

17:15

Thursday 23 August

09:30

Talks

Session |

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09:30–10:00

Identification of particle interactions structure in experiments with polarized positron and electron beams at Linear Collider

Speaker

Alexander Babich

10:00–10:25

Form Factor for a System of the Two Fermions in the Relativistic Quasipotential Approach: Case of an Equal Masses and a Scalar Current

Speaker

Yuri Chernichenko

10:25–10:40

Quasipotential equations solutions for three dimensional harmonic oscillator in relativistic configurational representation

Speaker

Yury Hryshechkin

10:40–11:00

Computation of the propagator of a multiphoton vertex in the form of an algebraic sum of mean values

Speaker

Evgenii Reznikov

11:00–11:20

Break

11:20–11:50

Rare decays of strange mesons

Speaker

Sergey Avakyan

11:50–12:20

Scalar mesons as two and four-quark states

Speaker

Elena Avakyan

12:20–12:45

Poincare-covariant quark model of electroweak decays of light mesons

Speaker

Vadzim Haurysh

12:45–13:00

Resonance states of two particle relativistic systems for potentials with smooth "barrier"

13:00

Speaker

Sergey Fialka

14:00

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14:00–14:40

The canonical scalar massive field as a long-range gravity and the cosmic evolution of the gravitational constant**Speaker**

Maria Serdyukova

14:40–15:10

The corrections for one dimensional model of helical flux compression generators from two dimensional model**Speaker**

Viktar Haurylavets

15:10–15:30

Magnetized quark-gluon plasma at the LHC**Speaker**

Pavlo Minaiev

15:50

15:30–15:50

Break