

NEW TRENDS IN HIGH ENERGY PHYSICS

25.09.18

9:00 (5 min)
9:05 (20+5 min)

Opening

Prof. Mikhail ITKIS

International large research infrastructure of JINR

SECTION "STANDARD MODEL AND BEYOND"

Chairman: Dr. Richard LEDNICKÝ

9:30 (25+5 min)
10:00 (25+5 min)

Dr. Tomas DAVIDEK

Study of the properties of the Higgs boson

Dr. Gabriella GAUDIO

The ATLAS experiment. Status and prospects

10:30-10:50 Coffee break

SECTION "NEUTRINO AND ASTROPARTICLE PHYSICS"

Chairman: Prof. Mikhail ITKIS

10:50 (20+5 min)

Dr. Alexandre KOZLOV

Search for the neutrinoless double beta decay of Xenon-136 and dark matter at KamLAND

11:15 (20+5 min)

Mr. Christoph GENSTER

Status of Jiangmen Underground Neutrino Observatory

11:40 (20+5 min)

Valerio D'ANDREA

Neutrinoless double beta decay search with GERDA Phase II

12:05 (20+5 min)

Ms. Susanne MERTENS

First data of the KATRIN experiment

12:30-14:30 Lunch time

SECTION "NEUTRINO AND ASTROPARTICLE PHYSICS"

Chairman: Prof. Vadim BEDNYAKOV

14:30 (20+10 min)

Prof. Yuri EFREMENKO

Study of CEvNS by the COHERENT collaboration

15:00 (25+5 min)

Tomasz WACHALA

The latest results from the long-baseline neutrino experiment T2K

15:30 (20+5 min)

Vyacheslav BELOV

Actual status of "DANSS" project

16:00-16:20 Coffee break

SECTION "NEW FACILITIES, DETECTORS, COMPUTING AND DATA ANALYSES TECHNIQUES"

Chairman: Dr. Yury USOV

16:20 (20+5 min)

Dr. Yuri DAVYDOV

Tests of 3x3 undoped CsI matrix with an extremely low intensity electron beam

16:45 (20+5 min)

Dr. Yuri KHARZHEEV

Radiation hardness of scintillation detectors based on organic plastic scintillators and optical fibers

17:10 (20+5 min)

Mr. Mikhail LYABLIN

The Professional Precision Laser inclinometer: the noise origins and data processing

17:35 (20+5 min)

Mr. Ivan BEDNYAKOV

The Precision Laser Inclinometer, method of data processing and data storage

19:00 WELCOME PARTY

NEW TRENDS IN HIGH ENERGY PHYSICS

26.09.18

SECTION “STANDARD MODEL AND BEYOND”

Chairman: Dr. Vladimir GLAGOLEV

- 9:00 (25+5 min) **Prof. Bruce MELLADO** New physics at the EW scale and the production of multiple leptons at the LHC
- 9:30 (25+5 min) **Pavel KROKOVNY** Search for new physics with LHCb
- 10:00 (25+5 min) **Marek BOMBARA** Recent results with ALICE experiment

10:30-10:50 Coffee break

SECTION “ADVANCES IN THEORETICAL PHYSICS”

Chairman: Dr. Richard LEDNICKÝ

- 10:50 (20+5 min) **Prof. Dmitry KAZAKOV** Kinematically dependent renormalization
- 11:15 (20+5 min) **Prof. László JENKOVSZKY** The odderon: myths and reality
- 11:40 (20+5 min) **Mr. Olga SOLOVTSOVA** High-precision numerical estimates of Mellin-Barnes integrals for Mellin moments of the structure functions using a stationary phase contour
- 12:05 (20+5 min) **Dr. Ivan YELETSKIKH** Pentaquark states: current status from theory and experiment

12:30-14:30 Lunch time

SECTION “NEUTRINO AND ASTROPARTICLE PHYSICS”

Chairman: Prof. Mikhail ITKIS

- 14:30 (25+5 min) **Dr. Rastislav DVORNICKY** Baikal GVD experiment: present status and perspectives
- 15:00 (20+5 min) **Dr. Leonid TKATCHEV** The NUCLEON and TUS space experiments status
- 15:25 (20+5 min) **Dr. Artur BORODIN** Tunka Advanced Instrument for cosmic rays and Gamma Astronomy (TAIGA): status, results and perspectives

16:00-16:20 Coffee break

SECTION “NEW FACILITIES, DETECTORS, COMPUTING AND DATA ANALYSES TECHNIQUES”

Chairman: Dr. Dmitry PESHEKHONOV

- 16:20 (20+5 min) **Dr. Andreas THOMAS** First use of an active polarized Frozen Spin Target in a 4 π detector - detection of particles under cryogenic conditions below 1 Kelvin
- 16:45 (20+5 min) **Mr. Ivan GORODNOV** New cryostat for Bonn electron accelerator “ELSA”
- 17:10 (20+5 min) **Dr. Victor KASHEVAROV** Polarization experiments at MAMI and ELSA with Dubna-Mainz frozen spin target
- 17:35 (20+5 min) **Mr. Jakub VLASEK** Data acquisition system for the SCube detector
- 18:00 (20+5 min) **Mr. Antonin OPICAL** Control system for experimental setups of MASHA at cyclotron DC280

NEW TRENDS IN HIGH ENERGY PHYSICS

27.09.18

SECTION “NEW COLLIDERS AND BARIONIC MATTER STUDY”

Chairman: Prof. Bruce MELLADO

- 9:00 (25+5 min) **Prof. Tadeusz LESIAK** Future e^+e^- colliders at the energy frontier
9:30 (25+5 min) **Dr. Erica BRONDOLIN** News on physics and detectors at CLIC
10:00 (25+5 min) **Mr. Daniel CERVENKOV** The Belle II experiment

10:30-10:50 Coffee break

SECTION “STANDARD MODEL AND BEYOND”

Chairman: Prof. Yuri EFREMENKO

- 10:50 (25+5 min) **Dr. Rebecca CHISLETT** The muon $g-2$ experiment at Fermilab
11:20 (25+5 min) **Dr. Cecilia VOENA** Status and prospects of charged lepton flavor violation searches with the MEG-II experiment
11:50 (25+5 min) **Mr. Ciani GIACOMO** Gravitational wave astronomy with Virgo and the GW detectors network

12:30-14:30 Lunch time

15:00 EXCURSION

NEW TRENDS IN HIGH ENERGY PHYSICS

28.09.18

SECTION “STANDARD MODEL AND BEYOND”

Chairman: Dr. Yuri DAVYDOV

- 9:00 (25+5 min) **Dr. Hisataka YOSHIDA** COMET experiment: search for muon to electron conversion
9:30 (25+5 min) **Mr. Shoichiro NISHIMURA** Precision measurement of muonium hyperfine structure at J-PARC
10:00 (20+5 min) **Dr. Aidos ISSADYKOV** Hadronic and semileptonic decays of B_c meson

10:30-10:50 Coffee break

SECTION “NEW COLLIDERS AND BARIONIC MATTER STUDY”

Chairman: Chairman: Dr. Richard LEDNICKÝ

- 10:50 (20+5 min) **Dr. Andrey BUTENKO** Status of the NICA project at JINR
11:15 (20+5 min) **Dr. Georgy GOLOVANOV** Muon system for spin physics detector at NICA
11:40 (20+5 min) **Mr. Gleb POKATASHKIN** BM@N experiment at Nuclotron: status and first results
12:05 (20+5 min) **Dr. Oleg ROGACHEVSKIY** Fractal properties of the multiparticle events in heavy ion collisions

12:30-14:30 Lunch time

SECTION “NEUTRINO AND ASTROPARTICLE PHYSICS”

Chairman: Dr. Filippo VARANINI

- 14:30 (25+5 min) **Dr. Jae-Kwang HWANG** Charged dark matters, cosmic rays and extended standard model
15:00 (25+5 min) **Dr. Evgeny YAKUSHEV** Modern approaches in ultra-low background experiments at the LSM underground laboratory
15:30 (20+5 min) **Mr. Sergey ROZOV** Direct low-mass WIMP searches with HPGe semiconductor bolometers

16:00-16:20 Coffee break

SECTION “NEUTRINO AND ASTROPARTICLE PHYSICS”

Chairman: Dr. Jae-Kwang HWANG

- 16:20 (20+5 min) **Dr. Filippo VARANINI** Sterile neutrino searches with the ICARUS detector
16:45 (20+5 min) **Dr. Maxim GONCHAR** New results from the Daya Bay experiment
17:10 (20+5 min) **Dr. Alexey LUBASHEVSKIY** Investigation of neutrino properties with the vGEN spectrometer
17:35 (20+5 min) **Mr. Tomas NOSEK** NOvA recent results with neutrino-antineutrino data

NEW TRENDS IN HIGH ENERGY PHYSICS

29.09.18

SECTION "STANDARD MODEL AND BEYOND"

Chairman: Dr. Hisataka YOSHIDA

- 9:00 (25+5 min) **Prof. Antoni SZCZUREK** From D meson asymmetries at the LHC to neutrino production at IceCube
9:30 (20+5 min) **Prof. Gennady LYKASOV** Constraints on the intrinsic charm content of the proton from recent ATLAS data
9:55 (20+5 min) **Mr. Yuri KULCHITSKY** Probing QCD at high energy

10:30-10:50 Coffee break

SECTION "NEW FACILITIES, DETECTORS, COMPUTING AND DATA ANALYSES TECHNIQUES"

Chairman: Dr. Andrey BUTENKO

- 10:50 (20+5 min) **Dr. Sergei KOTOV** Machine learning methods for cluster identification in pixel detectors
11:15 (20+5 min) **Mr. Nikolay ATANOV** The front-end electronics of the Mu2e electromagnetic calorimeter
11:40 (20+5 min) **Dr. Pavel ZARUBIN** Overview of nuclear clustering studies in dissociation of relativistic light nuclei
12:05 (20+5 min) **Mrs. Irina ZARUBINA** Imaging of few-body nuclear systems in nuclear track emulsion

12:30-14:30 Lunch time

SECTION "STANDARD MODEL AND BEYOND"

Chairman: Prof. Antoni SZCZUREK

- 14:30 (25+5 min) **Ms. Merve SAHINSOY** Search for manifestations of new physics
15:00 (20+5 min) **Wolfgang SCHAEFER** Incoherent and coherent diffractive production of J/ψ and Y on heavy nuclei
15:25 (20+5 min) **Mr. Dmitry DEMIN** Experimental search of nuclear fusion reactions in a $p\tau\mu$ system

16:00-16:20 Coffee break

SECTION "STANDARD MODEL AND BEYOND"

Chairman: Prof. László JENKOVSZKY

- 16:20 (20+5 min) **Mr. Ievgen LAVRUKHIN** MUSE and the proton radius puzzle
16:45 (20+5 min) **Dr. Nelli PUKHAEVA** Future e^+e^- colliders and CR effects study

17:10 - Closing