

Programme

“CERN-Ukraine Cooperation: Current State and Prospects” to the 100th Anniversary of the National Academy of Sciences of Ukraine”

May 15, 2018 (09 : 00 – 19 : 00),

Location: ISMA

9:30 – 10:00 Registration

10:00 – 10:30 Official Conference Opening (B. Grynyov, M. Strikha, A. Zagorodny)

Session Chair: B. Grynyov

10:30 – 11:00 **Maksym Strikha / Anatoly Zagorodny** – Science Landscape in Ukraine

11:00 – 11:30 **Christoph Schaefer** – CERN HEP Experimental Program

11:30 – 12:00 **Maxim Titov** – What is Next in Particle Physics – Experimental Perspective

12:00 – 12:30 **Jorgen D’Hondt** – European Strategy Update for Particle Physics

12:30 – 12:50 **Evgenij Martynov** – Discovery of Odderon in TOTEM experiment on pp scattering at 13 TeV

12:50 – 13:00 Group photo

13:00 – 13:50 Lunch

13:50 – 14:45 ISMA exhibition tour

LHCb Experiment

Session Chair: V. Skalozub

14:45 – 15:15 **Giovanni Passaleva** – LHCb Experiment: Recent Results and Future Plans

15:15 – 15:35 **Valery Pugatch** – Physics and Techniques of the Fixed Metal Microstrip Target for the LHCb experiment

15:35 – 15:55 **Andrey Usachov, Valeriia Zhovkovska, Maksym Teklishyn, Sergey Barsuk** – Charmonia production via hadronic decays

15:55 – 16:15 **Vasyl Dobishuk** – J/ψ production in Pb-Pb ultra-peripheral collisions at 5 TeV in the LHCb experiment

16:15 – 16:35 **Serhii Koliiev** – Radiation monitoring system for LHCb in 2017 year

16:35 – 16:55 **Volodymyr Kotlyar** – Mechanisms of open charm and beauty production at the LHC energies (UA9 – LHCb collaboration)

16:55 – 17:15 Coffee break

Future e^+e^- Linear Collider Experiments (CLIC / ILC) and FCC

Session Chair: V. Storizhko

17:15 – 17:45 **Stainer Stapnes / Sergio Calatroni** – CLIC Project Status and Future Plans

17:45 – 18:05 **Vladimir Baturin** – Development of methods for increasing the stability of materials of accelerating structures to highly vacuum electrical discharges in the CLIC structures and experimental studies of the influence of an external magnetic field on the probability of a highly vacuum breakdown

- 18:05 – 18:25 **Ivan Onishchenko / Gennadiy Sotnikov** – Development of the multibunch dielectric wakefield accelerator concept
- 18:25 – 18:45 **Oleg Bezshyyko** – Time Projection Chamber for the ILC
- 19:00 Conference dinner

May 16, 2018 (09 : 00 – 18 : 00),
Location: NSC KIPT

Session Chair: S. Barsuk

- 9:00 – 9:30 **Mykola Shul’ga** – High Energy Physics in KIPT

CMS Experiment

- 9:30 – 10:00 **Tiziano Camporesi** – The CMS experiment upgrades for the High Luminosity LHC
- 10:00 – 10:20 **Anatoli Zarubin** – RDMS – CMS Collaboration
- 10:20 – 10:40 **Alexander Korchin** – Search for effects of new physics in some decays of the Higgs boson
- 10:40 – 11:00 **Leonid Levchuk** – KIPT participation in CMS data processing
- 11:00 – 11:30 Coffee break
- 11:30 – 11:50 **Alexander Lukhanin** – Studies at KIPT of radiation resistance of scintillators for CMS forward hadron calorimetry
- 11:50 – 12:10 **Irina Tupitsyna** – Tungstates, molybdates and chalcogenides scintillation crystals for nuclear physics experiments
- 12:10 – 12:30 **Andrey Boyarintsev** – Radiation hardness detectors developed by ISMA for HEP experiments
- 12:30 – 12:50 **Petr Zhmurin** – Increasing the level of radiation hardness of a plastic scintillator
- 12:50 – 14:00 Lunch

French-CERN-UA Cooperation and NON-LHC Experiments

Session Chair: M. Titov

- 14:00 – 14:30 **Sergey Barsuk** – French-CERN-UA Cooperation in the framework of LIA IDEATE
- 14:30 – 14:50 **Igor Kirillin** – Bent crystal as an efficient tool for high energy particle beam control (UA9)
- 14:50 – 15:10 **Serguei Fomin** – Feasibility of measuring the magnetic dipole moments of the charm baryons at the LHC using bent crystals (UA9)
- 15:10 – 15:30 **Serguei Trofimenko** – Electromagnetic processes with “half-bare” particles at high energies (UA63)
- 15:30 – 15:50 **Oleksii Kovalchuk** – Timepix (metal mode) and metal microstrip detectors measuring spatial distributions of charged particles and photons beams
- 15:50 – 16:10 **Andrii Bryzhalin** – “Production of Colliders Transition Elements by Explosion Welding”
- 16:10 – 16:40 Coffee break

Theory session:

Session Chair: N. Shulga

- 16:40 – 17:00 **Alexander Pevzner** – Model-independent constraints on the Abelian $ZB^{\wedge}I$ couplings within the ATLAS data on the dilepton production processes at 13 TeV
- 17:00 – 17:20 **Alexander Zhuk** – Screening of gravitational interaction in the Universe
- 17:20 – 17:40 **Vladimir Skalozub** – Effective photon-photon-gluon vertex and scattering of photons in quark-gluon plasma
- 17:40 – 18:00 **Taras Zagoskin** – The Higgs boson ZZ couplings in the Higgs-strahlung at the ILC

May 17, 2018 (09 : 00 – 14 : 00),

Location: ISMA

SHIP Experiment

Session Chair: V. Pugach

- 9:00 – 9:30 **Eric van Herwijnen** – The SHiP (Search for Hidden Particles) Experiment: Current Status and Future Plans
- 9:30 – 9:50 **Stanislav Vilchinskii** – SHIP Physics Case
- 9:50 – 10:10 **Volodymyr Gorkavenko** – Search for light Higgs-like particles in proton collisions with a target at the SHiP experiment
- 10:10 – 10:30 **Oleg Bezshyyko** – Review of experimental R&D activities in the SHIP experiment of TSNUK team
- 10:30 – 11:00 Coffee-break

ALICE Experiment

Session Chair: S. Vilchinskii

- 11:00 – 11:30 **Paul Kuijer** – ALICE Experiment: Recent Results and Future Plans
- 11:30 – 11:50 **Kyrill Bugaev** – Realistic equation of state of hadronic matter and possible signals of two QCD phase transitions in heavy ion collisions
- 11:50 – 12:10 **Anton Alkin** – Charged-particle multiplicity with ALICE at LHC
- 12:10 – 12:30 **Yuriy Sinyukov** – The development of the space-time picture of nucleus-nucleus collisions
- 12:30 – 12:50 **Ihor Tymchuk** – LTU for CERN: current status and prospects
- 12:50 – 13:10 **Oleksandr Dyomin** – Grid Cluster UA-ISMA as a constituent of the Tier 2 Centre of ALICE experiment
- 13:10 Conference closing