



# **New Trends in High-Energy Physics**

**Sunday 02 October 2016 - Saturday 08 October 2016**

**Budva, Becici, "Splendid Hotel"**

## **Book of abstracts**

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**Dark Matter particles in the galactic halo**

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**PARALLEL SESSION / 13**

**ICARUS experiment - status and perspectives**

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**PARALLEL SESSION / 14**

**The increase of the light collection from scintillation strip with hole for WLS fiber using various types of fillers.**

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**PARALLEL SESSION / 16**

**Direct search of keV sterile neutrino in tritium beta decay by “Troitsk nu-mass” experiment**

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**High Technology Application to Modernization of International Electron-Positron Linear Collider (ILC)**

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**PARALLEL SESSION / 26**

**Twenty Years of the Analytic Perturbation Theory in QCD**

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**MAIN SESSION / 30**

**Search for new exotic phenomena with the ATLAS detector at the LHC**

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**Review of Higgs Results from the CMS experiment**

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**PARALLEL SESSION / 36**

**Diffraction dissociation of relativistic nuclei in nuclear track emulsion**

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**MAIN SESSION / 37**

**PEN and Nab: new precision tests of lepton and quark-lepton universality**

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**Recent applications of the technique of nuclear track emulsion**

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**PARALLEL SESSION / 39**

**Particle tracking in the PEN experiment.**

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**A Very Intense Neutrino Super Beam Experiment for Leptonic CP Violation Discovery based on the European Spallation Source Linac**

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**MAIN SESSION / 42**

**Heavy quark distributions in nucleon: collider tests**

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**Particles evolution in the early Universe**

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PARALLEL SESSION / 44

## Manifestation of the unstable nuclei in relativistic dissociation of the $^{10}\text{B}$ and $^{11}\text{C}$ nuclei

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## Breakdown of QCD factorization in hard hadronic diffraction

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## Heavy flavors in nucleus-nucleus and proton-nucleus collisions

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## Quantum simulations with cold atoms: from solid state to high energy physics and cosmology

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## Neutrino in the Standard Model and beyond

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**Elementary Particles, dark matter candidate and new extended standard model**

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**A new measurement of the anomalous magnetic moment of muon at Fermilab**

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**MAIN SESSION / 52**

**Rare decays of heavy mesons in covariant confined quark model.**

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**PARALLEL SESSION / 53**

**Proton charge radius and its consistency with the experiments**

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MAIN SESSION / 54

**Reduction of total precise error of muon  $g-2$  anomaly and QED  $\alpha(M^2_Z)$  by  $Unitary\&Analytic$  model description of pseudoscalar meson nonet EM structure**

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PARALLEL SESSION / 56

**New type straws: properties and quality**

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MAIN SESSION / 57

**Prediction of  $\Lambda$ -hyperon magnetic FF and ratio  $|G_E^\Lambda/G_M^\Lambda|$  /in time-like region**

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**Numerical values of  $f^F$ ,  $f^D$ ,  $f^S$  coupling constants in SU(3) invariant interaction Lagrangian of vector-meson nonet with  $1/2^+$  octet baryons.**

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**Two-particle Bose--Einstein correlations in pp collisions at 0.9 and 7 TeV measured with the ATLAS detector**

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**The CLIC physics potential**

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**Heavy quark physics and XYZ states in covariant quark model**

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**Searches for lepton number violation and resonances in the  $K^{+-} \rightarrow \pi \mu \mu$  decays at the NA48/2 experiment**

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**PHENIX results on leading particles and jets measured in Cu+Au collisions at RHIC**

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**PARALLEL SESSION / 65**

**HERA Results on Proton Structure and Hard QCD**

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**MAIN SESSION / 67**

**Searches for new physics at TeV scale in dilepton final states at ATLAS experiment**

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**MAIN SESSION / 68**

**New phase space calculations for  $\beta^+$  and EC decay modes**

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**Review of Higgs Results from the ATLAS experiment**

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**PARALLEL SESSION / 70**

**Search for  $K^+$  to  $\pi^+$   $\nu \nu$  at NA62**

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## **Text of article: New type straws: properties and quality**

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**MAIN SESSION / 73**

## **The recent results from Super-K**

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**PARALLEL SESSION / 74**

## **Solar-blind photodetectors with AlGaN photocathodes for light registration in UVC range**

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**MAIN SESSION / 76**

## **The Mu2e experiment at Fermilab**

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**PARALLEL SESSION / 77**

**Elastic and inelastic diffraction at the LHC**

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**MAIN SESSION / 78**

**Polarized Drell-Yan measurement at COMPASS**

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**MAIN SESSION / 79**

**How to differentiate function based on integration operation**

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**PARALLEL SESSION / 80**

**Using the cathode surface of straw tube for measuring the track coordinate along the wire and increasing rate capability.**

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**MAIN SESSION / 81**

**DANSS Reactor Antineutrino Project:: Status and Proof of Principle**

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**PARALLEL SESSION / 82**

**Neutral pion form factor measurement by the NA62 experiment**

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**MAIN SESSION / 83**

**Status of the NICA project**

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**Overview of Recent Results From the T2K Experiment**

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**MAIN SESSION / 85**

**Physics Results from NOvA Neutrino Oscillation Experiment**

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**In search of  $\mu \rightarrow e\gamma$ : Final result of the MEG experiment**

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**PARALLEL SESSION / 87**

**Quantum Field Theory Methods in Classical Physics**

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**Recent results from PHENIX experiment at RHIC**

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**MAIN SESSION / 89**

**Shear, turbulence and its observable consequences in heavy ion reactions**

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**MAIN SESSION / 90**

**Longitudinal vector form factor in the pion  $\beta$  decay**

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**First detections of a gravitational wave signals**

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**Axions as Dark Matter**

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**PARALLEL SESSION / 93**

**Neutrinoless Double-Beta Decay with Emission of Single Electron**

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**PARALLEL SESSION / 94**

**Diffraction at HERA**

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**MAIN SESSION / 95**

**Search for supersymmetry: the present status**

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**MAIN SESSION / 96**

**ALICE results in pp, pA and AA collisions at the LHC**

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**The Gravitational Wave Observatory and Its First Discoveries**

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**MAIN SESSION / 98**

**Latest Results from the Daya Bay Reactor Neutrino Experiment**

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**MAIN SESSION / 99**

**Left-left squark mixing in the  $K^+ \rightarrow \pi^+ \bar{\nu} \nu$  decay**

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**MAIN SESSION / 101**

**Bose-Einstein Correlation and Colour Reconnection in Particle Physics**

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**MAIN SESSION / 102**

**Search for New Physics with CMS**

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**MAIN SESSION / 103**

## **Deep Underground Neutrino Experiment: Status and Prospects**

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**MAIN SESSION / 104**

## **High energy behaviour of maximally supersymmetric gauge theories**

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**MAIN SESSION / 105**

## **Opening talk**

**106**

## **Opening Talk**

**PARALLEL SESSION / 107**

## **He3-He4 Dilution Refrigerators, Results, Traditions, 50 Years Anniversary**

**108**

## **hi**

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