

The Physics of the Dimuons at the LHC

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcoming Address

Thursday, 23 June 2022 10:15 (20 minutes)

Presenters: MATVEEV, Viktor (Joint Institute for Nuclear Research (RU)); KARJAVINE, Vladimir (Joint Institute for Nuclear Research (RU))

Session Classification: Opening

Contribution ID: 2

Type: **not specified**

CMS Experiment at the LHC

Thursday, 23 June 2022 10:35 (30 minutes)

Presenter: ZARUBIN, Anatoli (Joint Institute for Nuclear Research (RU))

Session Classification: Opening

Contribution ID: 3

Type: **not specified**

Dimuons. The Beginning and Legacy

Thursday, 23 June 2022 11:05 (25 minutes)

Presenter: SHMATOV, Sergei (Joint Institute for Nuclear Research (RU))

Session Classification: Opening

Contribution ID: 4

Type: **not specified**

CMS Muon System

Thursday, 23 June 2022 11:50 (20 minutes)

Presenter: PERELYGIN, Victor (Joint Institute for Nuclear Research (RU))

Session Classification: Historical survey

Contribution ID: 5

Type: **not specified**

CMS HCAL System

Thursday, 23 June 2022 12:10 (20 minutes)

Presenter: BUNIN, Pasha (Joint Institute for Nuclear Research (RU))

Session Classification: Historical survey

Contribution ID: 6

Type: **not specified**

Physics with Dimuons with the CMS Experiment at the LHC

Thursday, 23 June 2022 15:00 (30 minutes)

Presenter: LANEV, Alexander (Joint Institute for Nuclear Research (RU))

Session Classification: Physics Beyond the Standard Model

Contribution ID: 7

Type: **not specified**

Reconstruction of High-energy Muons

Thursday, 23 June 2022 12:30 (20 minutes)

Presenter: PALCHIK, Vladimir (Joint Institute for Nuclear Research (RU))

Session Classification: Historical survey

Contribution ID: 8

Type: **not specified**

Belarus in CMS Physics Program

Thursday, 23 June 2022 12:50 (20 minutes)

Presenter: MAKARENKO, Vladimir (Institute for Nuclear Problems BSU (BY))

Session Classification: Historical survey

Contribution ID: 9

Type: **not specified**

Beyond the Standard Model: Qou vadis?

Thursday, 23 June 2022 14:30 (30 minutes)

Presenter: KAZAKOV, Dmitry (JINR)

Session Classification: Physics Beyond the Standard Model

Contribution ID: **10**

Type: **not specified**

Searches for Long-Lived Particles Using Muons in CMS

Thursday, 23 June 2022 15:30 (30 minutes)

Presenter: VALOUEV, Slava (University of California Los Angeles (US))

Session Classification: Physics Beyond the Standard Model

Contribution ID: 11

Type: **not specified**

Searches for Dark Matter at the LHC

Thursday, 23 June 2022 16:00 (30 minutes)

Presenter: SAVINA, Mariia (Joint Institute for Nuclear Research (RU))

Session Classification: Physics Beyond the Standard Model

Contribution ID: 12

Type: **not specified**

Searches for Dark Matter with the CMS Detector in bb/Z + MET channels

Thursday, 23 June 2022 16:30 (20 minutes)

Presenter: HAYRAPETYAN, Aram (A.Alikhanyan National Science Laboratory (AM))

Session Classification: Physics Beyond the Standard Model

Contribution ID: 13

Type: **not specified**

Dilepton Angular Distributions in Standard Model and Beyond

Thursday, 23 June 2022 17:10 (30 minutes)

Presenter: TERYAEV, Oleg (JINR)

Session Classification: Precision Tests of the Standard Model

Contribution ID: 14

Type: **not specified**

The Forward-Backward Asymmetry in Drell-Yan Process with the CMS Experiment

Thursday, 23 June 2022 18:20 (20 minutes)

Presenter: GORBUNOV, Ilya (Joint Institute for Nuclear Research (RU))

Session Classification: Precision Tests of the Standard Model

Contribution ID: 15

Type: **not specified**

Measurements of the Angular Coefficients in Drell-Yan Process with the CMS Experiment

Thursday, 23 June 2022 18:40 (20 minutes)

Presenter: SHALAEV, Vladislav (Joint Institute for Nuclear Research (RU))

Session Classification: Precision Tests of the Standard Model

Contribution ID: **16**

Type: **not specified**

Drell-Yan Radiative Corrections

Thursday, 23 June 2022 17:40 (20 minutes)

Presenter: ZYKUNOV, Vladimir (Joint Institute for Nuclear Research (RU))

Session Classification: Precision Tests of the Standard Model

Contribution ID: 17

Type: **not specified**

EW corrections to CC and NC Drell-Yan with SANC Monte Carlo Tools

Thursday, 23 June 2022 18:00 (20 minutes)

Presenter: SADYKOV, Renat (Joint Institute for Nuclear Research (RU))

Session Classification: Precision Tests of the Standard Model

Contribution ID: **18**

Type: **not specified**

Forward proton scattering in association with muon pair production via the photon fusion mechanism at the LHC

Friday, 24 June 2022 15:20 (20 minutes)

Presenter: KARKARYAN, Evgeny (LPI, Moscow)

Session Classification: Heavy Ion Physics and QCD

Contribution ID: **19**

Type: **not specified**

Optimization of Dimuon Selection and Photon Induced Background

Friday, 24 June 2022 15:40 (20 minutes)

Presenter: ZHIZHIN, Ilia (Joint Institute for Nuclear Research (RU))

Session Classification: Heavy Ion Physics and QCD

Contribution ID: 20

Type: **not specified**

Higgs Boson(s) 10th Years Later

Friday, 24 June 2022 09:30 (30 minutes)

Presenter: NIKITENKO, Alexandre (NRC "Kurchatov Institute" (ITEP) (RU))

Session Classification: 10th Anniversary of the Higgs Boson Discovery

Contribution ID: 21

Type: **not specified**

Cosmology with BEH Field

Friday, 24 June 2022 10:30 (30 minutes)

Presenter: GORBUNOV, Dmitry (Russian Academy of Sciences (RU))

Session Classification: 10th Anniversary of the Higgs Boson Discovery

Contribution ID: 22

Type: **not specified**

Search for Resonances in the Mass Spectrum of Muon Pairs Produced in Association with b quark jets in proton-proton collisions at 8 and 13 TeV

Friday, 24 June 2022 11:20 (20 minutes)

Presenter: KODOLOVA, Olga (M.V. Lomonosov Moscow State University (RU))

Session Classification: Higgs Boson, Computing and Reconstruction

Contribution ID: 23

Type: **not specified**

Studies of the Standard Model Higgs Boson produced through vector boson fusion and decaying to $b\bar{b}$

Friday, 24 June 2022 11:40 (20 minutes)

Presenter: TUMASYAN, Armen (A.Alikhanyan National Science Laboratory (AM))

Session Classification: Higgs Boson, Computing and Reconstruction

Contribution ID: 24

Type: **not specified**

Computing @ LHC and NICA

Friday, 24 June 2022 09:00 (30 minutes)

Presenter: KORENKOV, Vladimir (Joint Institute for Nuclear Research (RU))

Session Classification: 10th Anniversary of the Higgs Boson Discovery

Contribution ID: 25

Type: **not specified**

Development of Algorithms for CSC Track-Segment Reconstruction

Friday, 24 June 2022 12:00 (20 minutes)

Presenter: VOYTISHIN, Nikolay (Joint Institute for Nuclear Research (RU))

Session Classification: Higgs Boson, Computing and Reconstruction

Contribution ID: 26

Type: **not specified**

CMS Muon System Alignment

Friday, 24 June 2022 12:20 (20 minutes)

Presenter: KAMENEV, Alexey (Joint Institute for Nuclear Research (RU))

Session Classification: Higgs Boson, Computing and Reconstruction

Contribution ID: 27

Type: **not specified**

Anomaly detection with ML for Muon DQM Development of Machine

Friday, 24 June 2022 12:40 (20 minutes)

Presenter: GORBUNOV, Ilya (Joint Institute for Nuclear Research (RU))

Session Classification: Higgs Boson, Computing and Reconstruction

Contribution ID: **28**

Type: **not specified**

Heavy Ion Physics: from LHC to NICA

Friday, 24 June 2022 14:30 (30 minutes)

Presenter: LOKHTIN, Igor (M.V. Lomonosov Moscow State University (RU))

Session Classification: Heavy Ion Physics and QCD

Contribution ID: 29

Type: **not specified**

The recent results on quarkonia in heavy-ion collisions with the CMS experiment at the LHC

Friday, 24 June 2022 15:00 (20 minutes)

Presenter: PETRUSHANKO, Serguei (M.V. Lomonosov Moscow State University (RU))

Session Classification: Heavy Ion Physics and QCD

Contribution ID: 30

Type: **not specified**

Measurement of Fractions and Characteristics of Quark and Gluon Jets with the CMS

Friday, 24 June 2022 16:20 (20 minutes)

Presenter: SHULHA, Siarhei (Joint Institute for Nuclear Research (RU))

Session Classification: Heavy Ion Physics and QCD

Contribution ID: **31**

Type: **not specified**

Measurement of Gluon Jet Fractions in Inclusive Jet Data

Friday, 24 June 2022 16:40 (20 minutes)

Presenter: BUDKOUSKI, Dzmitry (Joint Institute for Nuclear Research (RU))

Session Classification: Heavy Ion Physics and QCD

Contribution ID: 32

Type: **not specified**

Charged particles pair production in pp scattering: survival factor and proton tagging

Friday, 24 June 2022 16:00 (20 minutes)

Presenter: GODUNOV, Sergey

Session Classification: Heavy Ion Physics and QCD

Contribution ID: **33**

Type: **not specified**

TBA

Session Classification: Heavy Ion Physics and QCD

Contribution ID: 34

Type: **not specified**

Higgs Boson and Naturalness Problem in Standard Model

Friday, 24 June 2022 10:00 (30 minutes)

Presenter: KIM, Victor (Petersburg Nuclear Physics Institute - PNPI NRC KI, Gatchina & SPbPU, St. Petersburg)

Session Classification: 10th Anniversary of the Higgs Boson Discovery

Contribution ID: 35

Type: **not specified**

Opening

Thursday, 23 June 2022 10:00 (15 minutes)

Presenter: GOLUTVIN, Igor (Joint Institute for Nuclear Research (RU))

Session Classification: Opening