

Session Program

16-20 May 2022

The 10th Annual
Large Hadron Collider Physics Conference
May 16-21, 2022



10th Edition of the Large Hadron Collider Physics Conference

Poster Session I

Tuesday 17 May

19:00

Poster Session I

Session

19:00–20:00 **Dynamically groomed jet radius in heavy-ion collisions**

Speakers

Adam Takacs, Alba Ontoso, Paul Caucal

19:00–20:00

Charge and heat transport coefficients of a hot and dense QCD matter in the presence of a weak magnetic field

Speaker

Shubhalaxmi Rath

19:00–20:00

Fluid properties of hadron gas produced in relativistic collisions of pp and AA

Speaker

Ronald Scaria

19:00–20:00

Transverse sphericity dependence of global observables in heavy-ion collisions at the LHC using AMPT model

Speaker

Mr Suraj Prasad

19:00–20:00

Measurement of $R_{\{2\}}(\Delta\eta, \Delta\varphi)$ and $P_{\{2\}}(\Delta\eta, \Delta\varphi)$ correlation functions in pp collisions at $\sqrt{s} = 13\sim\text{TeV}$ using ALICE data

Speaker

Baidyanath Sahoo

19:00–20:00

Insight into the magnetic response of hadron gas using non-extensive statistics

Speaker

Mr Girija Sankar Pradhan

19:00–20:00

Measurement of high-pt electron performance in proton-lead collisions in the ATLAS experiment

Speaker

Patrycja Anna Potepa

19:00–20:00

Exclusive dilepton production in ultraperipheral Pb+Pb collisions in ATLAS

Speaker

Agnieszka Ewa Ogrodnik

19:00–20:00

Prediction for global properties in O+O collisions at $\sqrt{s_{NN}} = 7$ TeV using AMPT model**Speakers**

Debadatta Behera, Raghunath Sahoo

19:00–20:00

Multiplicity-dependent study of $\Lambda(1520)$ resonance production in pp collisions at $\sqrt{s} = 5.02$ and 13 TeV with ALICE**Speaker**

Sonali Padhan

19:00–20:00

Multiplicity dependence of intra-jet properties in small collision systems with ALICE**Speaker**

Protttoy Das

19:00–20:00

Measurements of $\psi(2S)$ production in Pb-Pb collisions with ALICE at the LHC**Speaker**

Hushnud Hushnud

19:00–20:00

Measurement of $\psi(2S)$ production as a function of charged-particle multiplicity in pp collisions at $\sqrt{s} = 13$ TeV and p-Pb collisions at $\sqrt{s_{NN}} = 8.16$ TeV with ALICE at the LHC**Speaker**

Theraa Tork

19:00–20:00

A Deep Learning Based Estimator for Elliptic Flow in Heavy Ion Collisions**Speaker**

Mr Neelkamal Mallick

19:00–20:00

Hint of pion condensation in proton-proton collisions at the LHC using non-extensive Tsallis statistics**Speaker**

Dushmanta Sahu

19:00–20:00

Prospects of the LHCf operation in 2022**Speaker**

Ken Ohashi

19:00–20:00

Implementation of a Portal Dedicated to Higgs Bosons for Experts and the General Public**Speaker**

Andre Sopczak

19:00–20:00

Outreach Modules for a New Particle Search Using the ATLAS Forward Proton Detector and Higgs Boson Physics**Speaker**

Andre Sopczak

19:00–20:00

Crowdfunding your outreach project**Speakers**

Jason Robert Veatch, Mikhail Stolpovskiy

19:00–20:00

QuarkNet in LHC Education and Outreach**Speakers**

Kenneth William Cecire, Marla Glover, Michael Wadness, Shane Wood, Thomas McCauley

19:00–20:00

Sharing ATLAS Science: communicating to the public**Speaker**

Maria Moreno Llacer

19:00–20:00

ATLAS Open Data: developing education and outreach resources from research data**Speaker**

Ricardo Jose Morais Silva Goncalo

19:00–20:00

Educational Printables: from colouring books to cheat & fact sheets**Speaker**

Valerie Buxbaum

19:00–20:00

ATLAS Virtual Visits: Bringing the world to our detector**Speaker**

Elise Maria Le Boulicaut

19:00–20:00

A new ATLAS Visitor Centre**Speaker**

Sascha Mehlhase

19:00–20:00

Increasing Multilingualism in ATLAS' Science Communication**Speaker**

Ana Maria Rodriguez Vera

19:00–20:00

Evolution of Regional, Age and Gender Demographics in the ATLAS Collaboration**Speaker**

Holly Pacey

19:00–20:00

"Particle physics for babies": outreach for the youngest audience**Speaker**

Dr Louie Dartmoor Corpe

19:00–20:00

Point Cloud Deep Learning Methods for Pion Reconstruction in the ATLAS Detector

Speaker

Mariel Pettee

19:00–20:00

Constraining Deep Neural Network classifiers' systematic uncertainty via input feature space reduction**Speaker**

Mr Andrea Di Luca

19:00–20:00

Leveraging universality of jet taggers through transfer learning**Speakers**

Dr Frederic Alexandre Dreyer, Pier Francesco Monni, Radoslaw Piotr Grabarczyk

19:00–20:00

Performance of ATLAS Forward Proton Detector during LHC Run 2**Speaker**

Paula Agnieszka Erland

19:00–20:00

Performance and calibration of the ATLAS Tile Calorimeter**Speaker**

Stefio Yosse Andrean

19:00–20:00

Studies of the long term stability of track selection criteria for the ATLAS track counting luminosity measurement**Speaker**

Thomas Christopher Mclachlan

19:00–20:00

A Tool for Calculation of the Radiation Parameters on the Early Stage of Simulation Geometry Development in CATIA**Speaker**

Alexander Sharmazanashvili

19:00–20:00

The performance of the ATLAS Inner Detector tracking trigger in high pileup collisions at 13 TeV at the Large Hadron Collider (Run-2) and plans for Run-3**Speaker**

Zuchen Huang

19:00–20:00

The new ATLAS triggers for long-lived particles that leave unconventional signature in the tracking detectors**Speaker**

Benjamin Philip Kerridge

19:00–20:00

The Muon Trigger of the ATLAS experiment: performance and improvements for Run 3**Speaker**

Alec Drobac

19:00–20:00

ATLAS Trigger system for Run 3

Speaker

Claudia Merlassino

19:00–20:00

Improved track reconstruction for prompt and long-lived particles in ATLAS for the LHC Run 3**Speaker**

Makayla Vessella

19:00–20:00

Two New Developments on the Statistical Treatment of Flavour Tagging Uncertainties in ATLAS**Speaker**

Yan Ke

19:00–20:00

Measurement of the b -tagging efficiency using multijet events in ATLAS**Speaker**

Valentina Vecchio

19:00–20:00

New ATLAS b-tagging Algorithm for Run3**Speaker**

Alexander Froch

19:00–20:00

Lepton and quark mixing patterns with generalized CP transformations**Speaker**

Joy Ganguly

19:00–20:00

Theoretical analysis of $B^0 \rightarrow \phi \ell^+ \ell^-$ decay**Speaker**

Irina Parnova

19:00–20:00

Investigation of the right-handed vector current via unbinned angular analysis of $B \rightarrow D^*(D\pi)\ell\nu_\ell$ **Speaker**

Zhuoran Huang

19:00–20:00

CP-Violating Invariants in the SMEFT**Speaker**

Emanuele Gendy Abd El Sayed

19:00–20:00

 $p \rightarrow e + \gamma$ in LCSR framework**Speaker**

Anshika Bansal

19:00–20:00

Long lived NMSSM : Analysing some long-lived NSLP signatures in the NMSSM**Speaker**

Amandip De

19:00–20:00

Long-lived dark photons at ATLAS: a search for unconventional signatures at the LHC**Speaker**

Iacopo Longarini

19:00–20:00

Search for neutral long-lived particles decaying into displaced jets in the ATLAS calorimeter**Speaker**

Mason Proffitt

19:00–20:00

Search for Dark Matter produced in association with a Standard Model Higgs boson decaying to b-quarks using the full Run 2 collision data with the ATLAS detector**Speaker**

Jay Chan

19:00–20:00

Investigating New Physics Models with Signature of Same-Sign Diboson $E\{E\!/\!\!/\}_T$ **Speaker**

Dibyashree Sengupta

19:00–20:00

Long-Lived Light Mediators from Higgs boson Decay at HL-LHC, FCC-hh and a Proposal of Dedicated LLP Detectors for FCC-hh**Speaker**

Rhitaja Sengupta

19:00–20:00

Prospects for dark boson searches via exotic Higgs decays in Run 3 and high luminosity era of the LHC**Speaker**

Tamer Elkafrawy

19:00–20:00

Searches for supersymmetry in hadronic final states with the CMS detector**Speaker**

Tribeni Mishra

19:00–20:00

Search for resonant pair production of Higgs bosons in the $4b$ final state using 139/fb of $\sqrt{s} = 13$ TeV pp collision data with the ATLAS detector**Speaker**

Rui Zhang

19:00–20:00

Search for Heavy (pseudo)Higgs boson A/H produced in association with a top-antitop quark pair leading to the final state with four top quarks in pp collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector

Speaker

Shuhui Huang

19:00–20:00

Search for single production of a vector-like T quark decaying into a Higgs boson and top quark with fully hadronic final states using the ATLAS detector**Speaker**

Joel Hengwei Foo

19:00–20:00

Constraining 3-3-1 Models at the LHC and Future Hadron Colliders**Speaker**

Ms Yoxara Sánchez Villamizar

19:00–20:00

Search for electroweak production of supersymmetric sleptons and charginos with the ATLAS detector**Speaker**

Eric Ballabene

19:00–20:00

W-boson angular coefficients at LHC at high precision**Speaker**

Timea Vitos

19:00–20:00

Intrinsic quantum mechanics behind the Standard Model? - predictions in the baryon and Higgs sectors**Speaker**

Mr Ole Lynnerup Trinhammer

19:00–20:00

Muonic charged Higgs boson discovery channel at the LHC**Speaker**

Mr Mohammed Boukidi

19:00–20:00

Rare Higgs Decays in the Standard Model**Speaker**

Xi Gong

19:00–20:00

Measurement prospects for di-Higgs production in the HH to bbyy channel with the ATLAS experiment at the HL-LHC**Speaker**

Alex Zeng Wang

19:00–20:00

Projected sensitivity of Higgs boson pair production combining the bbyy and bbtatau decay channels at the HL-LHC with the ATLAS detector**Speaker**

Alkaid Cheng

19:00–20:00

Search for the Higgs boson decaying to a pair of muons in pp collisions at 13 TeV with the ATLAS detector

Speaker

Jay Chan

19:00–20:00

Probing the CP nature of the top-Higgs Yukawa coupling in ttH and tH events with H→bb using the ATLAS detector**Speaker**

Zak Lawrence

19:00–20:00

Virtual QCD Corrections to gg→ZH via a Transverse Momentum Expansion**Speaker**

Marco Vitti

19:00–20:00

Pair charged Higgs productions at NLO in e+ e- collider within the Inert Doublet model .**Speaker**

Mr Hamza Abouabid

19:00–20:00

A novel experimental search channel for very light Higgses in the Type-I 2HDM**Speakers**

Semlali Souad, Semlali souad

19:00–20:00

Multi-partonic cascades in expanding medium**Speaker**

Mr Souvik Priyam Adhya

19:00–20:00

Extended relaxation time approximation and relativistic dissipative hydrodynamics**Speaker**

Mrs Dipika Dash

19:00–20:00

Light nuclei production with/without critical fluctuation**Speaker**

Shanjin Wu

19:00–20:00

Spin magnetohydrodynamics**Speaker**

Mr Rajeev Singh

19:00–20:00

Intermittency analysis of charged hadrons generated in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV and 5.02 TeV using PYTHIA8/ Angantyr**Speaker**

Mr Salman K Malik

19:00–20:00

A new Scattering and Neutrino Detector at the LHC**Speaker**

Dario De Simone

19:00–20:00

Dedicated Triggers for Displaced Jets using Timing Information from Electromagnetic Calorimeter at HL-LHC**Speaker**

Prabhat Solanki

19:00–20:00

ME0 second generation prototype chamber characterization for CMS phase II upgrade in the Muon forward region**Speaker**

Mi Ran Kim

19:00–20:00

Status of the CSM FPGA Irradiation Test for the HL-LHC ATLAS Muon Spectrometer Upgrade**Speaker**

Jem Aizen Mendiola Guhit

19:00–20:00

Upgrade of the ATLAS Luminosity Monitor for HL-LHC**Speaker**

Jack Landon

19:00–20:00

Upgrade of ATLAS Hadronic Tile Calorimeter for the High Luminosity LHC**Speaker**

Edward Khomotso Nkadimeng

19:00–20:00

Development of the ATLAS Liquid Argon Calorimeter Readout Electronics for the HL-LHC**Speaker**

Maheyer Jamshed Shroff

19:00–20:00

Physics and performance of the High Granularity Timing Detector**Speaker**

Fatima Bendebba

19:00–20:00

Searching for an eco-friendly gas mixture for the ALICE Resistive Plate Chambers**Speaker**

Mr Luca Quaglia

19:00–20:00

The ATLAS New Small Wheel Simulation and Reconstruction Software and Detector Performance Studies**Speaker**

Maria Carnesale

19:00–20:00

The Control System of the New Small Wheel Electronics for the ATLAS experiment**Speaker**

Polyneikis Tzanis

19:00–20:00

Study of the correlation between the construction parameters of the MM readout boards and performance of the Micromegas detectors**Speaker**

Matteo Greco

19:00–20:00

Precision Timing with the CMS MTD Barrel Timing Layer for HL-LHC**Speaker**

John Dervan

19:00–20:00

Reduction of high voltage discharge in GEM detectors for the ME0 station of the CMS forward muon system**Speaker**

Salwa Mohamed

19:00–20:00

Heavy flavor jet tagging algorithm developments at CMS for HL-LHC**Speaker**

Mr Emanuel Pfeffer

19:00–20:00

ATLAS Roman Pots at LHC Run 3 - Detector Status**Speaker**

Rafał Staszewski

19:00–20:00

Developing a production database for the High Granularity Timing Detector for ATLAS Phase-II upgrade**Speaker**

Malak Ait Tamlihat

19:00–20:00

ATLAS LAr Calorimeter Commissioning for LHC Run-3**Speaker**

Federica Piazza

19:00–20:00

Development of the USTC LGAD sensors for the ATLAS HGTD upgrade**Speaker**

Xiangxuan Zheng

19:00–20:00

Event Filter Tracking for the Upgrade of the ATLAS Trigger and Data Acquisition System**Speaker**

Sudha Ahuja

19:00–20:00

The High-Level Trigger for the CMS Phase-2 Upgrade**Speaker**

Thiago Tomei Fernandez

19:00–20:00

CP-violating anomalous interactions at Large Hadron Collider**Speaker**

Ms Apurba Tiwari

19:00–20:00

Measurement of differential cross sections for the production of top quark pairs and of additional jets in pp collisions at $\sqrt{s} = 13$ TeV**Speaker**

Henriette Aarup Petersen

19:00–20:00

Novel broad-mass search for new scalar particles in FCNC top quark decays using the full Run 2 data of the ATLAS detector**Speaker**

Adrian Salvador Salas

19:00–20:00

Measurement of the top quark pole mass using $t\bar{t}$ +jet events in the dilepton final state at 13 TeV**Speaker**

Sebastian Wuchterl

19:00–20:00

Measurement of heavy-flavor production in the high-mass dimuon spectrum in pp collisions at $\sqrt{s} = 13$ TeV with ALICE**Speaker**

Michele Pennisi

19:00–20:00

Determination of the strong-coupling constant from the Z-boson transverse-momentum distribution**Speaker**

Stefano Camarda

19:00–20:00

Energy and momentum-dependent studies of R_2 and P_2 correlation functions in p-p collisions using color reconnection and rope hadronization models**Speaker**

Mr Dibakar Bauri

19:00–20:00

Transverse Sphericity and Multiplicity Dependence of R_2 and P_2 Correlation Functions in pp Collisions at $\sqrt{s} = 7$ TeV Using PYTHIA8**Speaker**

Baidyanath Sahoo

19:00–20:00

Event shape and multiplicity dependence of $K^*(892)^0$ production at mid-rapidity in pp collisions at $\sqrt{s} = 13$ TeV with ALICE at the LHC**Speaker**

Suman Deb

19:00–20:00

Proton parton distribution functions using ATLAS data

Speaker

Eimear Isobel Conroy

19:00–20:00 **First inverse moments of heavy-hadron distribution amplitudes****Speaker**

Alisa Shukhtina

19:00–20:00

Measurement and QCD analysis of double-differential inclusive jet cross sections at 13 TeV**Speaker**

Toni Makela

19:00–20:00

New tunes of PYTHIA8 to the Minimum Bias data at 13TeV using different PDF sets**Speaker**

Nameeqa Firdous

19:00–20:00

Probing phenomenological models implemented in PYTHIA8**Speaker**

Nameeqa Firdous

19:00–20:00

Measurement of the forward η meson production cross section in p-p collisions at $\sqrt{s}=13$ TeV with the LHCf Arm2 detector**Speaker**

Giuseppe Piparo

19:00–20:00

In medium properties of an axion within a 2+1 flavor Polyakov loop enhanced Nambu-Jona-Lasinio model**Speaker**

Dr Arpan Das

19:00–20:00

Quarks and gluons in the Lund plane**Speaker**

Adam Takacs

19:00–20:00

Probing the hadronic phase of large hadronizing system through the study of the $\Lambda(1520)$ resonance with ALICE at the LHC**Speaker**

Dr Neelima Agrawal

19:00–20:00

Nuclear modification factors of prompt and non-prompt J/ψ in Pb-Pb collisions at $\sqrt{s_{NN}}= 5.02$ TeV at midrapidity with ALICE**Speaker**

Mr Himanshu Sharma

19:00–20:00

Transverse sphericity and multiplicity dependent study of various higher order moments of $\langle p_{\text{T}} \rangle$ distribution in pp collisions using PYTHIA8

Speaker

Subhadeep Roy

19:00–20:00

Study of resonance's properties in heavy-ion collisions using angular hadron-resonance correlations in ALICE experiment.**Speaker**

Zuzana Jakubcinova

19:00–20:00

Scaling properties of charged particles generated in Xe-Xe collisions at $\sqrt{s_{NN}} = 5.44$ TeV using AMPT Model**Speaker**

Zarina Banoo

19:00–20:00

Identical-particle (pion and kaon) femtoscopy in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with Therminator2 modeled with (3+1)D viscous hydrodynamics**Speaker**

Pritam Chakraborty

20:00