Session Program

12–16 Dec 2022

XXV DAE-BRNS High Energy Physics Symposium 2022

Poster - 3

IISER Mohali, Lecture Hall Complex, IISER Mohali
IISER Mohali, Sector 81, Knowledge city, SAS Nagar, Punjab, India

Thursday 15 December

14:00

Poster - 3: D3

Poster Session |
Location: IISER Mohali, Lecture Hall Complex, IISER Mohali, Sector 81, Knowledge city, SAS Nagar, Punjab, India |
Conveners: Dr Vishal Bhardwaj, Dr Ambresh Shivaji, Dr Satyajit Jena

Studying light sterile neutrino in P2O experiment

Speaker
Dinesh Kumar Singha

Thermal corrections to dark matter annihilation processes

Speaker
Prabhat Butola

Simulation studies with Lambda particles for benchmark test at miniCBM experiment

Speaker
Apar Agarwal

Calibration and weather studies of DEASA detectors

Speaker
Mr Shivam Kulshrestha

Quantisation of Dirac equation in κ-deformed space-time

Speaker
vishnu rajagopal

Local multiplicity fluctuations in Pb$-$Pb collisions at $\sqrt{s_{\rm{NN}}}$ = 2.76 TeV with ALICE at the LHC

Speaker
Sheetal Sharma

Non-standard neutrino interactions in light mediator models at reactor experiments

Speaker
Sumit Ghosh

Seasonal variation of cosmic muon at the NOvA near detector

Speaker
Amit Pal

A study on transverse spherocity dependent initial and final state anisotropies in heavy-ion collisions at the LHC

Speaker
Suraj Prasad

Analytic topological dyonic hairy black holes and thermodynamics

Speaker
Ms Supragyan Priyadarshinee

Measurement of electrons from beauty-hadron decays in pp collisions at $\sqrt{s}$ = 2.76 TeV to 13 TeV with ALICE

Speaker
Mr Vivek Kumar Singh

Phases of a 10-D hardwall model

Speaker
AKASH SINGH

Intermittency and scaling behaviour in high energy heavy ion collisions

Speaker
Ramni Gupta

Study of secondary particles produced by Ultra High Energy Cosmic Rays

Speaker
Mr RITESH SHARMA

Uncertainties in atmospheric lepton production for inference in neutrino astronomy

Speaker
Ashish Narayan

Study the particle identification performance for K_{s}->pi^{+} pi^{-} decays using sPlot method

Speaker
Ms Sanjeeda Bharati Das

Numerical modeling and simulation for GEM signals.

Speaker
Sagarika Swain

Subjet multiplicities in neutral current deep inelastic ep scattering at the future Electron-Ion Collider

Speaker
Siddharth Jain

Numerically analyzing self-interacting dark matter

Speaker
UTKARSH PATEL

Validity of tribimaximal and golden ratio mixing patterns under radiative corrections with varying SUSY breaking scale

Speaker
Ms Pheiroijam Wilina

Elliptic flow of ϕ mesons in Au + Au collisions at E_{lab} = 35 A GeV using PHSD model

Speaker
Mr Waseem Ahmad Bhat

Measurement of charge balance function at CMS

Speaker
Subash Chandra Behera

Study of B to $K_2^*l_1l_2$ decay in U1 LeptoQuark Model.

Speaker
juhi vardani

Observation of the decays B->Psi(2S) Ks pi+pi- and Bs->Psi(2S)Ks at 13 TeV pp collision in the CMS experiment

Speaker
Mohammad Mobassir Ameen

Constraining Unitarity of Three-Flavor Neutrino Mixing Matrix from Next-Generation Long-Baseline Experiments

Speaker
Mr Sudipta Das

Study of net-baryon higher moments in PNJL model at RHIC energies for the signature of the QCD critical point

Speaker
Mr BIDHAN MANDAL

CDF-II W boson mass in the Dirac Scotogenic model

Speaker
Mr Sushant Yadav

Sub-leading jet shape modification in photon-tagged jets with JEWEL

Speaker
Rathijit Biswas

Probing neutrino mass ordering with supernova neutrinos

Speaker
Abinash Medhi

An analytical approach to estimate baryon asymmetry in fast expanding Universe: effect on lower bound of lightest right handed neutrino mass

Speaker
Dr Mainak Chakraborty

Quantization of Length, Area and Volume in Noncommutative Spaces

Speaker
Mr AAMIR RASHID

Heavy quark transport coefficients in a viscous QCD medium with collisional and radiative processes

Speaker
Adiba Shaikh

Toy MC Validation and Feldman-Cousins 2D Contours Study in Angular analysis of the decay Bs→ϕ μ+ μ- in Run2 at 13 TeV

Speaker
Samarendra Nayak

Deep Neural Network based Machine Learning algorithm for Muon Track Reconstruction

Speaker
Mr Arnab Sarker

Multiplicity, transverse momentum and pseudorapidity dependence of freeze-out parameters for open-charm hadrons in hadronic collisions at LHC energy

Speakers
Bhagyarathi Sahoo, Raghunath Sahoo

Effects of variations of SUSY breaking scale on neutrino oscillaton parameters at low energy scale under radiative corrections for different values of $\tan\beta$

Speaker
Khumanthem Helensana Devi

Search for dark matter using sub-PeV gamma-rays observed by Tibet $AS\gamma$

Speaker
Abhishek Dubey

Unpinning of superfluid vortices through (quasi) neutron-vortex scattering and pulsar glitches

Speaker
Ms Deepthi Godaba Venkata

Muon Anomalous Magnetic Moment and Neutrino Mass in $U(1)_{L_{\mu}-L_{\tau}}$ Extended Scotogenic Model

Speaker
Simran Arora

Hadronic phase lifetime and $K^*(892)^0/K$ ratio in relativistic nuclear collisions within a hydrodynamic framework

Speakers
Ronald Scaria, Dr Captain Rituraj Singh, Raghunath Sahoo

Heavy quarkonia dissociation at finite temperature and arbitrary magnetic field

Speaker
Ritesh Ghosh

Sterile sector impacting the correlations and degeneracies among mixing parameters at DUNE and the role of high energy beams

Speaker
Ms Sabila Parveen

Bakelite RPC prototype with new method of linseed oil coating

Speakers
Arindam Sen, Sayak Chatterjee, Dr Saikat Biswas

NOvA Detector Validation and Aging Studies

Speaker
Shivam .

Neutrino Mass Hierarchy, θ_{23} and CP-violation in a variant of Magic Majorana Neutrino Mass Matrix

Speaker
Tapender .

Sensitivity of crustal properties of neutron star on the parameters of compressible liquid drop model

Speaker
Vishal Parmar

Quality assurance of locally produced HGCAL baseplates

Speaker
Mukund Shelake

A phenomenological study of trimaximal neutrino mixing (TM$_1$ and TM$_2$) with a vanishing minor.

Speaker
Iffat Ara Mazumder

Non-extensive statistical effects on the thermodynamic properties of quark matter

Speaker
Mr Dhananjay Singh

Thermodynamic Curvature of AdS Black Holes with Dark Energy in the Grand Canonical Ensemble.

Speaker
ADITYA SINGH

Exact Two-Photon Exchange Contribution to Elastic Lepton-Proton Scattering: A Low-energy Effective Theoretical Approach

Speaker
POONAM CHOUDHARY

Lower bound of quark relaxation time and Its conduction at finite magnetic field

Speaker
Mr Cho Win Aung

Off-diagonal geometric phases in neutrino mixing

Speaker
Manosh T. M.

Next to SV resummed prediction for pseudoscalar Higgs boson production at NNLO$+\overline{\text{NNLL}}$

Speaker
ARUNIMA BHATTACHARYA

Wave phenomena in GRMHD

Speaker
Ankit Kumar Panda

An extended holographic Ricci dark energy dominated universe under the purview of truncated Israel-Stewart theory

Speaker
Sanjeeda Sultana

Geant-4 simulation study of cosmic ray muons with new muon telescope at GRAPES-3 experiment

Speaker
Ms Anupama Pathak

Test Suite development for ELM2 board for L1 Trigger upgrade

Speaker
Mandakini Ravindra Patil

Suppression of high pT Pi0 relative to prompt photon in central d+Au collision at 200GeV.

Speaker
Dr Niveditha Ramasubramanian

An LHC informed split-supersymmetric Higgs

Speaker
Ms Surabhi Gupta

Beyond the plane-wave transitions by wave packets: anomalous kinetic effect in quarkonium decays

Speaker
Kenji Nishiwaki

Neutrino mass and leptogenesis in Type I+II Seesaw model with a spontaneously broken CP symmetry

Speaker
Rohan Pramanick

Non-standard hVV interactions at Hadron Colliders

Speaker
Apurba Tiwari

Tweaking Neutrino flux of NuMI using NA61 Data

Speaker
Bhumika Mehta

Pair Production in time-dependent Electric field at Finite times

Speaker
DEEPAK Sah

Is the light neutralino thermal dark matter in the MSSM ruled out?

Speaker
Rhitaja Sengupta

Spin, Dimensionality, and Topology in the Fano Plane

Speaker
peter cameron

Deconfinement phase transition in bosonic BMN model at general coupling

Speaker
Mr Navdeep Singh Dhindsa

Minimal structure for neutrino mass matrix

Speaker
Mr Manoj Kumar

Screening and mixing effects in radiative M1 decays of charm baryons

Speaker
Mr Binesh Mohan

Isospin mass splittings in baryons

Speaker
Ms Thejus Mary S

On the nature of a thermal potential for QGP

Speaker
Saumen Datta

Reconstruction and identification of Electrons or Photons by the Level 1 Trigger of CMS

Speaker
Aravind Thachayath Sugunan

Angular analysis of the decay B+ → K∗(892)+μ+μ− in proton-proton collisions at s√ = 8 TeV

Speaker
Pritam Kalbhor

Singlet-Doublet Fermion Origin of Dark Matter, Neutrino Mass and W-Mass Anomaly

Speaker
SATYABRATA MAHAPATRA

A low power and high-performance frontend electronics for the large area GRAPES-3 muon telescope

Speaker
K. Ramesh

Compact star merger events of stars composed of interacting strange quark matter

Speaker
Mr Anil Kumar

Study of correlation between the relative transverse multiplicity activity in underlying event and transverse spherocity

Speakers
Arvind Khuntia, Prabhakar Palni

Multiplicity dependent study of π, K, and p production in pp, p-Pb and A-A collisions with ALICE at the LHC

Speaker
Navneet Kumar

Cross section for $^3H(\alpha,\gamma)^7Li$ Astrophysical Reaction using Scattering Phase Shifts

Speakers
Mrs Shikha Awasthi, Mr Amit Kumar

An Analytical Comparison Among Various Multivariate Methods Used for Particle Discrimination

Speakers
Dr Anand Kumar Dubey, Mr Yash Rana

Probing active-sterile neutrino oscillations with future long-baseline experiments

Speaker
Pragyanprasu Swain

Spectroscopic analysis of Heavy Pentaquarks

Speaker
Ms RASHMI GARG

Solution of the Harmonic plus Modified Yukawa-Kratzer potential and mass spectra of hidden charm and hidden strange tetraquark

Speaker
Kaushal Purohit

Bottomonium (1S) production including dissociation and damping due to QGP medium at $\sqrt{s_{NN}}$ = 2.76 TeV LHC energy}

Speaker
Dr Madhukar Mishra

Sensitivities on non-spinning and spinning primordial black hole dark matter with global 21 cm troughs

Speaker
Akash Kumar Saha

Sensitivity study of rare decay modes B^{+} → D_{s}^{(*)+} η, D_s^{(*)+} \bar{K}^{0}, D^{+}η, and D^{+} K^{0} at Belle.

Speaker
MANISH KUMAR

Interference effect in lepton number violating and conserving meson decays for a left-right symmetric model

Speaker
Mr Siddharth P. Maharathy

Probing heavy charged fermions at $e^+ \, e^-$ collider using the Optimal Observable Technique

Speaker
Sahabub Jahedi

Search for fast magnetic monopoles with NOvA far detector.

Speaker
Lipsarani Panda

Statistical significances for proton decay experiments

Speaker
Prudhvi Bhattiprolu

Plastic Scintillator Tile Fabrication and its Qualification for the Cosmic Muon Veto Detector at IICHEP

Speaker
Mandar Saraf

Disentangling $\mathcal CP$-violating Higgs top Interactions

Speaker
Apurba Tiwari

Charge dependent azimuthal distribution of muons

Speaker
Jim M John

Impact of Lorentz Invariance Violation at DUNE

Speaker
Mr Arnab Sarker

Probing the effects of Scalar Non Standard Interactions on the CP violation sensitivity at DUNE

Speaker
Abinash Medhi

RECONSTRUCTION OF WZ MASS AND DETERMINATION OF LIMITS ON SMEFT DIMENSION-8 OPERATORS USING UNITARITY OBSERVING FORMALISM IN THE WZ SCATTERING PROCESS

Speaker
Geetanjali Chaudhary

Perturbed golden ratio mixings and A5 discrete symmetry

Speaker
VICTORIA PUYAM

Beam energy calibration at Belle II.

Speaker
Ms Ansu Johnson

Understanding the temperature dependence of SiPM characteristics

Speaker
Mamta Jangra

Complementarity between DUNE and T2HK: gateway to improved CP coverage

Speaker
Masoom Singh

Electroweak Phase Transition in the Z_3-invariant NMSSM: Implications of LHC and Dark matter Searches and Prospects of Detecting the Gravitational Waves

Speaker
Subhojit Roy

Constraining long-range forces in the light of IceCube data

Speaker
Ashish Narang

Scotogenic Dark Matter symmetry from A_4 Flavor symmetry

Speaker
Ranjeet Kumar 2010507

Spin-parity assignment and decay property of Ω_b baryon

Speaker
AMEE KAKADIYA

Induced neutrino charge in a magnetized medium

Speaker
Mr Ankur Chaubey

Database development and deployment for HGCAL

Speaker
Mr Prashant Shingade

15:00