

XXIV DAE-BRNS
high energy physics symposium
December 14 - 18, 2020

Virtual Conference

National Institute of Science Education and Research
Jatni Odisha 752050 India

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Plenary talks

December 14, 2020

PLENARY-INAUGURAL

TOPIC : INAUGURAL SESSION

TIME : 10:25 TO 11:30 (IST)

ZOOM : **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	10:25 to 10:30	Sanjay Swain <i>Introductory remarks on the symposium</i>
2.	10:30 to 10:35	Sudhakar Panda Director, National Institute of Science Education and Research, India <i>Inauguration</i>
3.	10:35 to 10:55	Naba K. Mondal Raja Ramanna fellow, Saha Institute of Nuclear Physics Former spokesperson, India-based Neutrino Observatory <i>Building Mega Science high energy physics experiments in India: Possibilities, Challenges and Path forward</i>
4.	10:55 to 11:10	Bedangadas Mohanty <i>Short video on the scientific programme of the symposium</i>

December 14, 2020

PLENARY

TOPIC : VIEWS ON MEGA AND MULTI-COUNTRY SCIENCE
PROJECTS IN HIGH ENERGY PHYSICS

TIME : 17:00 TO 17:45 (IST)

ZOOM : **DAE-HEP-room1**

1.



K. Vijay Raghavan

Principal Scientific Adviser, Government of India

Views on mega and multi-country science projects in high energy physics

December 14, 2020


PLENARY-I

CHAIR/HOST: **Tarun Souradeep**

TOPIC : PARTICLE ASTROPHYSICS AND COSMOLOGY

TIME : 18:00 TO 20:00 (IST)


ZOOM : **DAE-HEP-room1**

1.  **Pasquale Serpico**

A personal overview of indirect dark matter searches: Status and challenge

18:00 to 18:40 (IST)
13:30 to 14:10 (CET)
07:30 to 08:10 (EST)
2.  **Luciano Rezzolla**

The first image of a black hole

18:40 to 19:20 (IST)
14:10 to 14:50 (CET)
08:10 to 08:50 (EST)
3.  **James Lattimer**

Measurements of Neutron Stars and the Dense Matter EOS

19:20 to 20:00 (IST)
14:50 to 15:30 (CET)
08:50 to 09:30 (EST)

December 15, 2020


PLENARY-II

CHAIR/HOST: **Sourendu Gupta**


TOPIC : RELATIVISTIC HEAVY-ION PHYSICS AND QCD

TIME : 18:00 TO 20:00 (IST)


ZOOM : **DAE-HEP-room1**

1.  **Sayantan Sharma**

Recent theoretical developments on QCD matter at finite temperature and density

18:00 to 18:40 (IST)
13:30 to 14:10 (CET)
07:30 to 08:10 (EST)
2.  **Andrea Dainese**

Recent results from the LHC heavy-ion programme

18:40 to 19:20 (IST)
14:10 to 14:50 (CET)
08:10 to 08:50 (EST)
3.  **Helen Caines**

Latest results from heavy-ion collisions at RHIC

19:20 to 20:00 (IST)
14:50 to 15:30 (CET)
08:50 to 09:30 (EST)

December 16, 2020


PLENARY-III

CHAIR/HOST: **Archana Sharma**

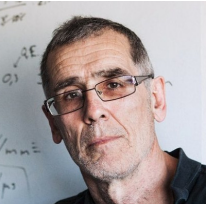
TOPIC : DETECTOR DEVELOPMENT AND
SOCIETAL APPLICATIONS

TIME : 14:00 TO 16:00 (IST)


ZOOM : **DAE-HEP-room1**

-  **Anthony Butler**

MARS: From the Higgs Boson to molecular radiology

14:00 to 14:40 (IST)
21:30 to 22:10 (NZDT)
09:30 to 10:10 (CET)
-  **Juan Gomez Cadenas**

Xenon TPCs for rare searches

14:40 to 15:20 (IST)
22:10 to 22:50 (NZDT)
10:10 to 10:50 (CET)
-  **Heinz Pernegger**

Recent developments in silicon and diamond detectors

15:20 to 16:00 (IST)
22:50 to 23:30 (NZDT)
10:50 to 11:30 (CET)

December 16, 2020

PLENARY-E-I

CHAIR/HOST: **Saumen Datta**

TOPIC : PUSHAN MAJUMDAR MEMORIAL SESSION

TIME : 17:30 TO 18:30 (IST)

ZOOM : **DAE-HEP-room1**

1.  **N. D. Hari Dass**

Pushing the frontiers of the QCD-String

17:30 to 17:50 (IST)
13:00 to 13:20 (CET)
2.  **Christian Lang**

Dynamical Quarks - Pushan Majumdar in Graz (2003-2005)

17:50 to 18:10 (IST)
13:20 to 13:40 (CET)
3.  **Sourendu Gupta**

Pushan Majumdar in Kolkata


18:10 to 18:30 (IST)
13:40 to 14:00 (CET)

December 16, 2020

PLENARY-IV


CHAIR/HOST: **Amol Dighe**

TOPIC : NEUTRINO PHYSICS
TIME : 20:00 TO 22:00 (IST)
ZOOM : **DAE-HEP-room1**

1. 


Kaladi S Babu

Theoretical status of neutrino physics

20:00 to 20:40 (IST)
08:30 to 09:10 (CST)
06:30 to 07:10 (PST)
15:30 to 16:10 (CET)
2. 

Hirohisa Tanaka

Recent experimental developments in neutrino physics

20:40 to 21:20 (IST)
09:10 to 09:50 (CST)
07:10 to 07:50 (PST)
16:10 to 16:50 (CET)
3. 

Sandhya Choubey

Future prospects in neutrino physics

21:20 to 22:00 (IST)
09:50 to 10:30 (CST)
07:50 to 08:30 (PST)
16:50 to 17:30 (CET)

December 17, 2020

PLENARY-E-II CO-ORDINATOR: **Bedangadas Mohanty**

TOPIC : GENERAL BODY MEETING

TIME : 14:30 TO 16:00 (IST)

ZOOM : **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	14:30 to 14:45	Bedangadas Mohanty <i>About the XXIV DAE-BRNS high energy physics symposium - Statistics and status</i>
2.	14:45 to 15:05	<i>Comments and feedback on the symposium</i>
3.	15:05 to 15:20	Praveer Asthana from office of Principal Scientific Advisor, Government of India <i>Mega science vision 2035 - Exercise</i>
4.	15:20 to 15:50	<i>Presentations for holding the next symposium and discussions + online voting</i>

December 17, 2020

PLENARY-E-III

MODERATORS: **Shrubabati Goswami**
Moon Moon Devi

TOPIC : EXPLORING PATHWAYS FOR ACHIEVING GENDER
PARITY IN HIGH ENERGY PHYSICS IN INDIA

TIME : 16:00 TO 18:00 (IST)

ZOOM : **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	16:00 to 16:10	Srubabati Goswami <i>Introduction</i>
Guest speakers		
1.	16:10 to 16:15	Rohini Godbole <i>Why do you need a gender equity group?</i>
2.	16:15 to 16:20	Preeti Kharb <i>The gender equity group in Astrophysics</i>
3.	16:20 to 16:25	Bindu Bambah <i>The Hyderabad Charter</i>
4.	16:25 to 16:30	Ajit Srivastava <i>Changes needed at the decision making and personal level</i>
5.	16:30 to 16:35	Anju Bhasin <i>Experiences as a High Energy Experimentalist</i>
Panel discussion		
1.	16:35 to 16:40	Ramadevi <i>The string theory landscape</i>
2.	16:40 to 16:45	Natasha Sharma <i>Challenges faced by a Young Physicist</i>
3.	16:45 to 16:50	R. Rangarajan <i>Institutional responsibility to be fair and supportive</i>
4.	16:50 to 16:55	D. Indumathi <i>Psychosocial issues and gender equity in HEP</i>

December 17, 2020


PLENARY-V

CHAIR/HOST: **Brajesh Choudhary**

TOPIC : STANDARD MODEL AND BEYOND STANDARD MODEL


TIME : 18:30 TO 20:30 (IST)

ZOOM : **DAE-HEP-room1**

1.  **Valerie Gibson**


Status of flavour physics

18:30 to 19:10 (IST)
13:00 to 13:40 (GMT)
14:00 to 14:40 (CET)
08:00 to 08:40 (EST)

2.  **Christophe Grojean**

Beyond standard model theory

19:10 to 19:50 (IST)
13:40 to 14:20 (GMT)
14:40 to 15:20 (CET)
08:40 to 09:20 (EST)

3.  **Greg Landsberg**

2020: Highlights from ATLAS and CMS

19:50 to 20:30 (IST)
14:20 to 15:00 (GMT)
15:20 to 16:00 (CET)
09:20 to 10:00 (EST)

December 18, 2020


PLENARY-VI

CHAIR/HOST: **Sunil Mukhi**


TOPIC : FORMAL THEORY

TIME : 09:30 TO 11:30 (IST)


ZOOM : **DAE-HEP-room1**

1.  **Gautam Mandal**

Bulk entanglement entropy/Quantum quenches

09:30 to 10:10 (IST)
2.  **Alok Laddha**

Geometry of Scattering Amplitudes

10:10 to 10:50 (IST)
3.  **Arpan Bhattacharyya**

Circuit Complexity and (some of) its application

10:50 to 11:30 (IST)

December 18, 2020

PLENARY-RBA CO-ORDINATOR: **Bedangadas Mohanty**

TOPIC : RAHUL BASU MEMORIAL THESIS AWARD

TIME : 14:30 TO 16:30 (IST)

ZOOM : **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	14:30 to 14:50	Chandroday Chattopadhyay <i>Entropy production and thermal fluctuations in higher-order dissipative hydrodynamics</i>
2.	14:50 to 15:10	Manibrata Sen <i>New aspects of supernova neutrino flavour conversions: In the standard model and beyond</i>
3.	15:10 to 15:30	Rafiqul Rahaman <i>Study of anomalous gauge boson self-couplings and the role of spin-1 polarizations</i>
4.	15:30 to 15:50	Resmi P K <i>Measurement of the CKM angle φ_3 from $B^\pm \rightarrow D(K_S^0 \pi^+ \pi^- \pi^0) K^\pm$ decays and future prospects</i>
5.	15:50 to 16:10	Suman Chatterjee <i>Jets as probes for precision measurements and candles for physics beyond standard model</i>

December 18, 2020


PLENARY-VII

CHAIR/HOST: **Ramesh Narayan**


TOPIC : FUTURE FACILITIES

TIME : 16:40 TO 19:20 (IST)


ZOOM : **DAE-HEP-room1**

1.  **Philip Diamond**


The Square Kilometre Array: a physics machine for the 21st Century

16:40 to 17:20 (IST)	06:10 to 06:50 (EST)
11:10 to 11:50 (GMT)	13:10 to 13:50 (IST - Israel)
12:10 to 12:50 (CET)	
2.  **Sheperd S Doeleman**

The next-generation Event Horizon Telescope: new approaches to black hole imaging

17:20 to 18:00 (IST)	06:50 to 07:30 (EST)
11:50 to 12:30 (GMT)	13:50 to 14:30 (IST - Israel)
12:50 to 13:30 (CET)	
3.  **Abhay Deshpande**

Electron Ion Collider: Science, Status and Invitation for Collaboration

18:00 to 18:40 (IST)	07:30 to 08:10 (EST)
12:30 to 13:10 (GMT)	14:30 to 15:10 (IST - Israel)
13:30 to 14:10 (CET)	
4.  **Halina Abramowicz**

Future collider projects - the European perspective

18:40 to 19:20 (IST)	08:10 to 08:50 (EST)
13:10 to 13:50 (GMT)	15:10 to 15:50 (IST - Israel)
14:10 to 14:50 (CET)	

December 18, 2020

PLENARY-CLOSING

TOPIC : CLOSING CEREMONY

TIME : 19:20 TO 19:40 (IST)

ZOOM : **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	19:20 to 19:25	<i>Announcement of the XXV DAE-BRNS high energy physics symposium 2022</i>
2.	19:25 to 19:40	Bedangadas Mohanty <i>Vote of thanks</i>

Mini-review and parallel talks

December 14, 2020

PARALLEL-I - 11:30 to 13:00 (IST)

Standard model and beyond standard model physics - IA

TIME: 11:30 TO 13:00 (IST)

CHAIR/HOST: **Pankaj Agrawal**

ZOOM: **DAE-HEP-room2**

SL No.	TIME	SPEAKER AND TITLE
1.	11:30 to 12:00	Arun M. Thalapillil [MINI-REVIEW] <i>Jets and jet substructure</i>
2.	12:00 to 12:15	Akanksha Bhardwaj <i>Jet substructure techniques to search for SUSY with gravitino LSP</i>
3.	12:15 to 12:30	Saikat Karmakar <i>Search for new physics with delayed jets in CMS</i>
4.	12:30 to 12:45	Meena Meena <i>Study for vector bosons production in association with heavy-flavor jets in proton-proton collisions</i>
5.	12:45 to 13:00	Suman Kumar Kundu <i>Investigating the parton shower model in PYTHIA8 with pp collision data at $\sqrt{s} = 13$ TeV</i>

Standard model and beyond standard model physics - IB

TIME: 11:30 TO 13:00 (IST)

CHAIR/HOST: **Kirtiman Ghosh**

ZOOM: **DAE-HEP-room4**

SL No.	TIME	SPEAKER AND TITLE
1.	11:30 to 11:45	Praveen Chandra Tiwari <i>Search for dark matter produced in association with bottom quarks at 13 TeV with CMS detector</i>
2.	11:30 to 11:45	Bisnupriya Sahu <i>Search for dark matter with a Leptoquark and Missing transverse energy in the final state by using proton-proton collision data of CMS detector at LHC at 13 TeV</i>

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3.	12:00 to 12:15	Deepak Kumar <i>Search for dark matter produced in association with a Higgs boson decaying to a pair of bottom quarks</i>
4.	12:15 to 12:30	Avik Paul <i>Gravitational Wave Signatures from First-order Phase transitions in an Extended Inert Doublet Dark Matter Model</i>
5.	12:30 to 12:45	Shiuli Chatterjee <i>Naturally freezing-in dark leptons</i>
6.	12:45 to 13:00	Arnab Roy <i>Light Singlino Dark Matter at the LHC</i>

Detectors development, future facilities and experiments, and societal applications - I

TIME: 11:30 to 13:00 (IST)

CHAIR/HOST: Supratik Mukhopadhyay

ZOOM: DAE-HEP-room3

SL No.	TIME	SPEAKER AND TITLE
1.	11:30 to 12:00	Md. Naimuddin [MINI-REVIEW] <i>GEM Detectors - Development, application and current status of Indian efforts</i>
2.	12:00 to 12:15	Promita Roy <i>Experimental and numerical studies of charging up in THGEMs</i>
3.	12:15 to 12:30	Rupamoy Bhattacharyya <i>Gain uniformity of a quad-GEM detector</i>
4.	12:30 to 12:45	Sunil Kumar <i>Sensitivity of Triple-GEM Detector for background radiation in CMS Experiment</i>
5.	12:45 to 13:00	Kanishka Rawat <i>A Simulation Study of Primary Ionization for Different Gas Mixtures using Gas Electron Multiplier</i>

Relativistic heavy-ion physics & QCD - I

TIME: 11:30 to 12:45 (IST)

CHAIR/HOST: Sadhana Dash

ZOOM: DAE-HEP-room1

SL No.	TIME	SPEAKER AND TITLE
1.	11:30 to 12:00	Nihar Ranjan Sahoo [MINI-REVIEW] <i>Recent RHIC and LHC measurement on jets and heavy-flavors</i>
2.	12:00 to 12:15	Md. Samsul Islam <i>Study of Heavy flavor decay muons in p-p and Pb-Pb collisions at LHC energies using Angantyr model for heavy-ion collisions in PYTHIA8</i>
3.	12:15 to 12:30	Baidyanath Sahoo <i>Simulation studies of $R_2(\Delta\eta, \Delta\phi)$ and $P_2(\Delta\eta, \Delta\phi)$ correlation functions in pp collisions with the PYTHIA and HERWIG models</i>

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4.	12:30 to 12:45	Rathijit Biswas <i>Deciphering quark and gluon jet modifications in heavy-ion collisions with γ-tagged jets</i>
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Cosmology and astro-particle physics - I

TIME: 11:30 to 13:00 (IST)

CHAIR/HOST: **Tuhin Ghosh**

ZOOM: **DAE-HEP-room5**

SL No.	TIME	SPEAKER AND TITLE
1.	11:30 to 12:00	Rishi Khatri [MINI-REVIEW] <i>Fundamental physics with CMB: LCDM anomalies, new particles, and primordial black holes</i>
2.	12:00 to 12:15	Srikanta Panda <i>Parity in Planck full-mission CMB</i>
3.	12:15 to 12:30	Vipin Sudevan <i>A Gibbs ILC Algorithm to Estimate CMB Posterior over Large Angular Scales of the Sky</i>
4.	12:30 to 12:45	Pramoda Kumar Samal <i>Testing statistical isotropy in cosmic microwave background polarization maps</i>
5.	12:45 to 13:00	Mayukh R Gangopadhyay <i>Non-thermal Hot Dark Matter from Inflaton/ Moduli Decay</i>

PARALLEL-II - 14:00 to 15:30 (IST)

Standard model and beyond standard model physics - IIA

TIME: 14:00 to 15:30 (IST)

CHAIR/HOST: **Seema Sharma**

ZOOM: **DAE-HEP-room2**

SL No.	TIME	SPEAKER AND TITLE
1.	14:00 to 14:30	Bhawna Gomber [MINI-REVIEW] <i>The experimental overview: SUSY</i>
2.	14:30 to 14:45	Tribeni Mishra <i>SUSY search with jets and large MET final state at CMS</i>
3.	14:45 to 15:00	Angira Rastogi <i>Probing BSM Physics with multileptons at CMS</i>
4.	15:00 to 15:15	Ayan Mukhopadhyay <i>Resummed transverse momentum distribution of pseudo-scalar Higgs boson at NNLO_A + NNLL</i>
5.	15:15 to 15:30	Ashish Sharma <i>Search for a b^* decaying to tW</i>

Standard model and beyond standard model physics - IIB

TIME: 14:00 to 15:30 (IST)

CHAIR/HOST: **Bipul Bhuyan**

ZOOM: **DAE-HEP-room4**

SL No.	TIME	SPEAKER AND TITLE
1.	14:00 to 14:15	Chandiprasad Kar <i>Recent measurement on $B \rightarrow \mu^+ \mu^-$ properties by using CMS data</i>
2.	14:15 to 14:30	Sagar Hazra <i>A study of the $B^0 \rightarrow K_S^0 \pi^0$ decay at Belle II</i>
3.	14:30 to 14:45	Debashis Sahoo <i>Probing lepton-number and baryon-number violating tau decays at Belle</i>
4.	14:45 to 15:00	Alibordi Muhammad <i>Measurement of CP violating weak phase in mesonic pseudoscalar to vector-vector decay</i>
5.	15:00 to 15:15	Subhashree Mohanty <i>Indirectly probing new physics in charmless decays of $B \rightarrow \phi \phi K$</i>
6.	15:15 to 15:30	Aishwarya Bhatta <i>Model independent analysis of $B \rightarrow K_1 l^+ l^-$ decay processes</i>

Detectors development, future facilities and experiments, and societal applications - II

TIME: 14:00 to 15:30 (IST)

CHAIR/HOST: **Bhartendu Singh**

ZOOM: **DAE-HEP-room3**

SL No.	TIME	SPEAKER AND TITLE
1.	14:00 to 14:30	Prakhar Garg [MINI-REVIEW] <i>MPGD based tracking and PID detectors</i>
2.	14:30 to 14:45	Manisha Lohan <i>The Micromegas detectors for ATLAS New Small Wheel upgrade</i>
3.	14:45 to 15:00	Prasanta Kumar Rout <i>A Study of Avalanche and Streamer Simulation in GEM detector using hydrodynamic approach</i>
4.	15:00 to 15:15	Pethuraj Sankaranarayanan <i>Improvement of time and position resolutions of RPC detectors using Time-over-Threshold information</i>
5.	15:15 to 15:30	Mamta Jangra <i>Characterisation of Hamamatsu SiPM for cosmic muon veto detector at IICHEP</i>

Relativistic heavy-ion physics & QCD - II

TIME: 14:00 to 15:30 (IST)

CHAIR/HOST: **Tapan Kumar Nayak**

ZOOM: **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	14:00 to 14:30	Natasha Sharma [MINI-REVIEW] <i>Recent measurements of (anti-)Nuclei production in high energy collisions</i>
2.	14:30 to 14:45	Pooja Pareek <i>Light neutral mesons measurement with the ALICE experiment at the LHC</i>
3.	14:45 to 15:00	Mohammad Asif Bhat <i>Measurements of inclusive photon production at forward rapidities using PMD in p-Pb collisions at $\sqrt{s_{NN}} = 8.16$ TeV with ALICE</i>
4.	15:00 to 15:15	Ruchi Chudasama <i>Observation of light-by-light scattering and search for axion-like particles with CMS experiment</i>
5.	15:15 to 15:30	Rohit Gupta <i>A unified formalism to study soft as well as the hard part of the transverse momentum spectra</i>

Formal Theory - I

TIME: 14:00 to 15:30 (IST)

CHAIR/HOST: Anshuman Maharana

ZOOM: DAE-HEP-room5

SL No.	TIME	SPEAKER AND TITLE
1.	14:00 to 14:30	Ashoke Sen [MINI-REVIEW] <i>Soft theorems</i>
2.	14:30 to 14:45	Ratul Mahanta <i>Analyticity of Off-shell Green's Functions in Superstring Field Theory</i>
3.	14:45 to 15:00	Sukanta Bhattacharyya <i>Generalized uncertainty principle in resonant detectors of gravitational waves</i>
4.	15:00 to 15:15	Sunandan Gangopadhyay <i>Cosmology of Bianchi type-I metric using renormalization group approach for quantum gravity</i>
5.	15:15 to 15:30	Suresh C. Jaryal <i>Formation of marginally trapped surface in gravitational collapse</i>

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PARALLEL-III - 09:30 to 11:00 (IST)

Standard model and beyond standard model physics - IIIA

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: **Sanjay Kumar Swain**

ZOOM: **DAE-HEP-room2**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 10:00	Kajari Mazumdar [MINI-REVIEW] <i>Status of precision electroweak measurements</i>
2.	10:00 to 10:15	Harjot Kaur <i>Search for compressed mass spectrum SUSY via electroweak VBF in single lepton final states using LHC Run II data collected with CMS detector at $\sqrt{s} = 13\text{TeV}$</i>
3.	10:15 to 10:30	Geetanjali Chaudhary <i>aQGC studies for WZ in the pp collisions using EFT framework at the LHC</i>
4.	10:30 to 10:45	Debarati Roy <i>Latest measurements of boosted top quark in CMS</i>
5.	10:45 to 11:00	Piyali Banerjee <i>Domain wall and CP violation in left right supersymmetry and its implications for leptogenesis and electron EDM</i>

Standard model and beyond standard model physics - IIIB

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: **Sudhansu Sekhar Biswal**

ZOOM: **DAE-HEP-room4**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 09:45	Ratan Sarkar <i>Unveiling Regions in multi-scale Feynman Integrals using Singularities and Power Geometry</i>
2.	09:45 to 10:00	Nikhila <i>Exploring the Possibility of Right Angled Unitarity Triangle</i>

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3.	10:00 to 10:15	Ritu Aggarwal <i>A new distribution for the charged particle multiplicities in DIS at HERA and hadron-hadron collisions at the LHC.</i>
4.	10:15 to 10:30	Sourav Pal <i>Multiparton webs beyond three loops</i>
5.	10:30 to 10:45	Ajjath A H <i>Next to soft corrections to Differential rapidity distributions at the hadronic colliders</i>
6.	10:45 to 11:00	Lopamudra Sahoo <i>Role of polarization in probing chiral structure of heavy gauge bosons at an e^+e^- collider</i>

Cosmology and astro-particle physics - II

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: **Girish Kulkarni**

ZOOM: **DAE-HEP-room5**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 10:00	Anupam Ray [MINI-REVIEW] <i>Probing Ultralight Primordial Black Holes as a Dark Matter Candidate</i>
2.	10:00 to 10:15	Sukannya Bhattacharya <i>Primordial black holes and particle dark matter from early matter domination</i>
3.	10:15 to 10:30	Somnath Mukhopadhyay <i>I-Eccentricity-Q relation as the universal relation for rotating magnetized white dwarfs</i>
4.	10:30 to 10:45	Vivek Baruah Thapa <i>Dense matter equation of state in strong magnetic field model with density-dependent parameterization</i>
5.	10:45 to 11:00	Suruj Jyoti Das <i>Cosmic Inflation in Minimal $U(1)_{B-L}$ Model: Implications for (Non) Thermal Dark Matter and Leptogenesis</i>

Detectors development, future facilities and experiments, and societal applications - III

TIME: 09:30 TO 11:00 (IST)

CHAIR/HOST: **Satyaki Bhattacharyya**

ZOOM: **DAE-HEP-room3**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 09:45	Greyson Nikolai Newton <i>Track-Based Muon System Alignment at CMS</i>
2.	09:45 to 10:00	Soumya Mukherjee <i>Mitigation of anomalous missing transverse momentum measurements in CMS experiment at the LHC Run2</i>

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3.	10:00 to 10:15	Shubham Pandey <i>Performance of CMS High Granularity Calorimeter prototype to charged pions in beam test experiments</i>
4.	10:15 to 10:30	Ashim Roy <i>Performance of electrons and photons in run 2 and prospects for run 3 with the CMS detector</i>
5.	10:30 to 10:45	Amandeep Kaur <i>Study of Radiation Damage in the CMS Hadron Calorimeter using Isolated Muons from 2018 Collision Data</i>
6.	10:45 to 11:00	Debabrata Bhowmik <i>Performance of CMS High Granularity Calorimeter prototype to positrons in beam test</i>

Relativistic heavy-ion physics & QCD - III

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: **Ranbir Singh**

ZOOM: **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 10:00	Sourav Kundu [MINI-REVIEW] <i>Latest results on light flavour Hadron production at LHC and RHIC</i>
2.	10:00 to 10:15	Dukhishyam Mallick <i>Latest results on hadronic resonance production with ALICE at the LHC</i>
3.	10:15 to 10:30	Sandeep Dudi <i>Strangeness and rapidity dependent studies in small system with ALICE at the LHC</i>
4.	10:30 to 10:45	Sushanta Tripathy <i>Topological studies of charged particle production and search for jet quenching effects in small collision systems with ALICE</i>
5.	10:45 to 11:00	Dushmanta Sahu <i>Multiplicity dependence study of thermodynamic and transport properties of the matter formed in ultra-relativistic collisions at LHC using Color String Percolation Model</i>

PARALLEL-IV - 11:15 to 12:45 (IST)

Standard model and beyond standard model physics - IVA

TIME: 11:15 to 12:45 (IST)

CHAIR/HOST: **Gagan B Mohanty**

ZOOM: **DAE-HEP-room2**

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:45	Alessandro Gaz [MINI-REVIEW] <i>The Belle-II experiment and first physics results</i>

2.	11:45 to 12:00	Chanchal Sharma <i>Rediscovery of “wrong sign” $D^0 \rightarrow K^+ \pi^- \pi^0$ decay with Belle II</i>
3.	12:00 to 12:15	Sourav Patra <i>Search for lepton flavor violation in bottomonium decays</i>
4.	12:15 to 12:30	Rashmi Dhamija <i>Search for the New Physics in bottomonium decays in Belle and Belle II</i>
5.	12:30 to 12:45	Niharika Rout <i>Determination of CKM angle ϕ_3 at Belle and Belle II</i>

Standard model and beyond standard model physics - IVB

TIME: 11:15 TO 12:45 (IST)

CHAIR/HOST: Ujjal Dey

ZOOM: [DAE-HEP-room4](#)

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:30	Abhaya Kumar Swain <i>M_{T2} as a probe of CP phase in $h \rightarrow \tau\tau$ at the LHC</i>
2.	11:30 to 11:45	Kaur Sandeep <i>EFT validity issues in aQGC analysis of same sign WW Vector Boson Scattering processes</i>
3.	11:45 to 12:00	A Dey <i>LHC signals of triplet scalars as dark matter portal: cut-based approach and improvement with gradient boosting and neural networks</i>
4.	12:00 to 12:15	Vandana Sahdev <i>Dark Matter, Muon Anomalous Magnetic Moment and the XENON1T Excess</i>
5.	12:15 to 12:30	Lopamudra Nayak <i>Search for Lepton Flavour Violation in B decays</i>
6.	12:30 to 12:45	Kundan Kumar Vishwakarma <i>Estimation of low-energy constants for bottom mesons in heavy meson chiral perturbation theory</i>

Detectors development, future facilities and experiments, and societal applications - IV

TIME: 11:15 to 12:45 (IST)

CHAIR/HOST: Prafulla K Behera

ZOOM: [DAE-HEP-room3](#)

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:30	Satyanarayana Bheesette <i>Cosmic Muon Veto for the mini-ICAL detector at IICHEP, Madurai</i>
2.	11:30 to 11:45	Piyush Verma <i>Mechanical design of Cosmic Muon veto detector around Mini-ICAL</i>

3.	11:45 to 12:00	Honey Khindri <i>Magnetic field simulations and measurements on mini-ICAL</i>
4.	12:00 to 12:15	Abdul Basith K <i>Charged hadron identification in Belle II silicon vertex detector</i>
5.	12:15 to 12:30	Rahul Tiwary <i>Lepton identification using Belle II Silicon-strip vertex detector (SVD)</i>
6.	12:30 to 12:45	Souvik Maity <i>Slow pion Tracking Efficiency Studies at Belle II detector</i>

Relativistic heavy-ion physics & QCD - IV

TIME: 11:15 to 13:00 (IST)

CHAIR/HOST: **Najmul Haque**

ZOOM: **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:45	Victor Roy [MINI-REVIEW] <i>Relativistic Magneto-hydrodynamics in heavy ion collisions</i>
2.	11:45 to 12:00	Mahfuzur Rahaman <i>Shear viscosities of a conformal fluid in the presence of strong external magnetic field</i>
3.	12:00 to 12:15	Manu Kurian <i>Thermal and electric charge transport in a weakly magnetized hot QCD medium</i>
4.	12:15 to 12:30	Snigdha Ghosh <i>Structure of magnetic field quantization in viscosity expression for relativistic fluid</i>
5.	12:30 to 12:45	Rajesh Biswas <i>Causality and stability in relativistic non-resistive dissipative magnetohydrodynamics</i>
5.	12:45 to 13:00	Subhasis Samanta <i>Quantum aspects of anisotropic conduction in Hadron Resonance Gas</i>

Formal theory - II

TIME: 11:15 to 12:45 (IST)

CHAIR/HOST: **Aninda Sinha**

ZOOM: **DAE-HEP-room5**

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:45	Rajesh Gopakumar [MINI-REVIEW] <i>Bootstrap</i>
2.	11:45 to 12:00	Ahmadullah Zahed <i>Crossing Symmetric Dispersion Relations in QFTs and CFT Mellin amplitudes</i>
3.	12:00 to 12:15	Parthiv Haldar <i>Relative entropy in scattering and the S-matrix bootstrap</i>

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4.	12:15 to 12:30	Gustavo Petronilo <i>Compactified Conformal Field Theories in Symplectic Manifolds</i>
5.	12:30 to 12:45	Shreyansh Shankar Dave <i>Effects of oscillating spacetime metric background on a complex scalar field and formation of topological vortices</i>

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PARALLEL-V - 09:30 to 11:00 (IST)

Standard model and beyond standard model physics - VA

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: **James Libby**

ZOOM: **DAE-HEP-room2**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 10:00	Rukmani Mohanta [MINI-REVIEW] <i>Implications of recent Flavour anomalies on New Physics</i>
2.	10:00 to 10:15	Aseem Vashisht <i>Exploring the Structural Features of Quark Mass Matrices in the Flavor Basis</i>
3.	10:15 to 10:30	Jai Deepak More <i>Charged lepton flavour violating decays as signatures of A_4 symmetry</i>
4.	10:30 to 10:45	Suchismita Sahoo <i>Flavor anomalies and radiative neutrino mass with vector leptoquark</i>
5.	10:45 to 11:00	Seema Choudhury <i>Recent results of lepton flavor universality in B decays at Belle</i>

Standard model and beyond standard model physics - VB

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: **Aruna K Nayak**

ZOOM: **DAE-HEP-room4**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 09:45	Amit Adhikary <i>Higgs self-coupling at the HL-LHC and HE-LHC</i>
2.	09:45 to 10:00	Soumya Mukherjee <i>Measurement of Higgs self-coupling from non-resonant Higgs pair production and decay to $b\bar{b}\gamma\gamma$ final state in the CMS experiment</i>
3.	10:00 to 10:15	Prafulla Saha <i>Recent measurements of Higgs boson properties in the diphoton decay channel with the CMS detector</i>

4.	10:15 to 10:30	Lata Panwar <i>Searches for non-resonant and resonant Higgs boson pair-production, decaying into $b\bar{b}\gamma\gamma$ final state, in the pp-collisions at $\sqrt{s} = 13$ TeV, using CMS Run2 data</i>
5.	10:30 to 10:45	Vishal Singh Ngairangbam <i>Improving bounds on invisible branching ratio of the Higgs with deep-learning</i>

Cosmology and astro-particle physics - III

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: Raghavan Rangarajan

ZOOM: [DAE-HEP-room5](#)

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 10:00	Subinoy Das [MINI-REVIEW] <i>Dark matter theory: mini review</i>
2.	10:00 to 10:15	Deepak Tiwari <i>Hunting for dark matter in the galactic centre with INO</i>
3.	10:15 to 10:30	Pradip K Sahu <i>Effect of dark matter in compact realistic neutron stars</i>
4.	10:30 to 10:45	Dibyendu Nanda <i>Dirac Neutrino Portal Dark Matter</i>
5.	10:45 to 11:00	Manoranjan Dutta <i>Singlet-Doublet Majorana Dark Matter and Neutrino Mass in a minimal Type-I Seesaw Scenario</i>

Detectors development, future facilities and experiments, and societal applications - V

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: V K S Kashyap

ZOOM: [DAE-HEP-room3](#)

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 10:00	Vivek Singh[MINI-REVIEW] <i>Cryogenics, detectors and sensors for High Energy Physics</i>
2.	10:00 to 10:15	Vijay Iyer <i>Large mass single electron resolution detector for dark matter and coherent neutrino-nucleus elastic interaction searches</i>
3.	10:15 to 10:30	Sunita Sahoo <i>The exploratory run at 555m deep underground with WIMP sensitive detector</i>
4.	10:30 to 10:45	Niraj Chaddha <i>The Single Channel Data Acquisition (DAQ) Module Developed For Dark Matter Search Experiment Using Superheated Liquid</i>

5.	10:45 to 11:00	Srinidhi Bheesette <i>Simulation studies for electron gun based magnetic probe</i>
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Relativistic heavy-ion physics & QCD - V

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: **Md. Nasim**

ZOOM: **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 10:00	Prithwish Tribedy [MINI-REVIEW] <i>Latest results on correlations and fluctuations (including collectivity)</i>
2.	10:00 to 10:15	Kishora Nayak <i>Directed flow of identified hadrons in Au+Au collisions with the STAR experiment at RHIC</i>
3.	10:15 to 10:30	Prabhupada Dixit <i>Azimuthal anisotropy measurement of ϕ mesons in Au+Au collisions at $\sqrt{s_{NN}} = 27$ and 54.4 GeV at STAR</i>
4.	10:30 to 10:45	Md. Rihan Haque <i>Constraining the Chiral Magnetic Effect with charge-dependent azimuthal correlations in ALICE</i>
5.	10:45 to 11:00	Prottay Das <i>Search for the Chiral Magnetic Wave using the ALICE detector in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV</i>

PARALLEL-VI - 11:15 to 12:45 (IST)

Standard model and beyond standard model physics - VIA

TIME: 11:15 to 12:45 (IST)

CHAIR/HOST: **Seema Bahinipati**

ZOOM: **DAE-HEP-room2**

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:45	Vishal Bharadwaj [MINI-REVIEW] <i>Charm Physics</i>
2.	11:45 to 12:00	Latika Aggarwal <i>Rare charm decays at Belle II</i>
3.	12:00 to 12:15	Anita Lavania <i>$D^0 \rightarrow K_L^0 \pi^+ \pi^-$ amplitude model and a study of K_L^0 reconstruction at BESIII</i>
4.	12:15 to 12:30	Haritha C P <i>Analysis of semileptonic decays of some b^- baryons within the SM and beyond</i>
5.	12:30 to 12:45	Pooja Mukherjee <i>On next to soft corrections to Inclusive cross sections at the colliders</i>

Standard model and beyond standard model physics - VIB

TIME: 11:15 TO 12:45 (IST)

CHAIR/HOST: Diptimoy Ghosh

ZOOM: [DAE-HEP-room4](#)

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:30	Radhika Arvind Vinze <i>Revisiting the Stuckelberg mechanism</i>
2.	11:30 to 11:45	Siddharth Prasad Maharathy <i>Interference Effect in LNV and LNC Meson Decays for Left Right Symmetric Model</i>
3.	11:45 to 12:00	Cyrin Neeraj <i>LHC bounds on $R_{D^{(*)}}$ motivated Leptoquark models</i>
4.	12:00 to 12:15	Avnish <i>Collider signatures of multi-charged fermions at the LHC in the framework of a radiative seesaw model</i>
5.	12:15 to 12:30	Arunima Bhattacharya <i>Two loop QCD amplitudes for di-pseudo scalar production in gluon fusion</i>
6.	12:30 to 12:45	Lopamudra Mukherjee <i>Study of Flavour Constraints on Dark Matter Models</i>

Cosmology and astro-particle physics - IV

TIME: 11:15 to 12:45 (IST)

CHAIR/HOST: Pravata K Mohanty

ZOOM: [DAE-HEP-room5](#)

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:30	Fahim Varsi <i>Latest results of cosmic ray energy spectrum and composition measurements from GRAPES-3 experiment</i>
2.	11:30 to 11:45	Girija Sankar Pradhan <i>Investigation of muon puzzle with GRAPES-3 experiment</i>
3.	11:45 to 12:00	Hari Haran Balakrishnan <i>A detailed investigation of thunderstorm events recorded in GRAPES-3 experiment</i>
4.	12:00 to 12:15	Samir Banik <i>Simulation of cosmogenic neutron backgrounds for a dark matter search experiment at Jaduguda Underground Science Laboratory</i>
5.	12:15 to 12:30	Ronald Scaria <i>Investigation of K/π ratio with accelerator and cosmic ray data</i>
6.	12:30 to 12:45	Suryanarayan Mondal <i>Cosmic muon momentum spectra at Madurai</i>

Relativistic heavy-ion physics & QCD - VI

TIME: 11:15 to 13:00 (IST)

CHAIR/HOST: Lokesh Kumar

ZOOM: DAE-HEP-room1

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:30	Ashish Pandav <i>Measurement of cumulants of net-charge and net-kaon distributions in Au+Au collisions at $\sqrt{s_{NN}} = 27$ GeV from the STAR experiment at RHIC</i>
2.	11:30 to 11:45	Guruprasad Prakash Kadam <i>Criticality in hadron resonance gas model: Critical exponents and transport properties</i>
3.	11:45 to 12:00	Maneesha Sushama Pradeep <i>QCD critical point, universality and small quark mass</i>
4.	12:00 to 12:15	Bushra Ali <i>Energy and Pseudorapidity Dependence of Multiplicity and Mean p_T Fluctuations in Ion-Ion Collisions at FAIR Energies</i>
5.	12:15 to 12:30	Bithika Karmakar <i>Anisotropic pressure and quark number susceptibility of strongly magnetized QCD medium</i>
6.	12:30 to 12:45	Abhisek Saha <i>Temperature fluctuations and Tsallis statistics in Relativistic Heavy Ion collisions</i>
7.	12:45 to 13:00	Pritam Chakraborty <i>Understanding long-range near-side ridge correlations in p-p collisions using rope hadronization at LHC energies</i>

Neutrino physics - I

TIME: 11:15 TO 12:30 (IST)

CHAIR/HOST: Tanumoy Mandal

ZOOM: DAE-HEP-room3

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:45	Reetanjali Moharana [MINI-REVIEW] <i>Neutrino astrophysics in multi-messenger era</i>
2.	11:45 to 12:00	Sudipta Das <i>Evolution of Mass-Mixing Parameters in Matter with Neutrino Non-Standard Interactions</i>
3.	12:00 to 12:15	Jogesh Rout <i>Impact of high energy beam tunes on the sensitivities to the standard unknowns at DUNE</i>
4.	12:15 to 12:30	Mehedi Masud <i>Probing the second oscillation maximum at DUNE</i>

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PARALLEL-VII - 09:30 to 11:00 (IST)

Cosmology and astro-particle physics - V

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: **N Khandai**

ZOOM: **DAE-HEP-room4**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 10:00	Tirthankar Roychoudhury [MINI-REVIEW] <i>Cosmology and high-redshift universe with the redshifted 21 cm line</i>
2.	10:00 to 10:15	Jyatsnasree Bora <i>Gravitational wave echoes from strange stars for various equations of state</i>
3.	10:15 to 10:30	Joseph P P J <i>Cosmological perturbations in the interacting dark sector: Mapping fields and fluids</i>
4.	10:30 to 10:45	Anish Ghoshal <i>UV Completion & PQ Phase Transitions with Gravitational Waves</i>
5.	10:45 to 11:00	Ashu Kushwaha <i>Helical magnetic fields from Riemann coupling</i>

Detectors development, future facilities and experiments, and societal applications - VI

TIME: 09:30 TO 11:00 (IST)

CHAIR/HOST: **Kirti Ranjan**

ZOOM: **DAE-HEP-room2**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 09:45	Alpana Alpana <i>Handling large data volumes of CMS High Granularity Calorimeter</i>
2.	09:45 to 10:00	Aravind T S <i>Heterogeneous Computing with GPUs for trigger decision in CMS Experiment at the LHC</i>
3.	10:00 to 10:15	Brij Kishor Jashal <i>Evolution of LHC computing grid for Run-III and beyond with emphasis on TIFR CMS Tier-II and Indian contribution</i>

4.	10:15 to 10:30	Mandakini Ravindra Patil <i>CMS L1 Trigger Upgrade Hardware</i>
5.	10:30 to 10:45	Rajdeep M Chatterjee <i>The upgrade of the CMS electromagnetic calorimeter: future prospects for precision timing and energy measurements at the High Luminosity LHC</i>
6.	10:45 to 11:00	Sandeep Bhowmik <i>Overview of the HL-LHC Upgrade for the CMS Level-1 Trigger</i>

Relativistic heavy-ion physics & QCD - VII

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: **Hiranmaya Mishra**

ZOOM: **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 09:45	Arpan Das <i>Correspondence between Israel-Stewart and first-order casual and stable hydrodynamics for the boost-invariant flow.</i>
2.	09:45 to 10:00	Ashutosh Dash <i>Far from equilibrium hydrodynamic attractor for an azimuthally symmetric system</i>
3.	10:00 to 10:15	Avdhesh Kumar <i>Spin dynamics in relaxation time approximation</i>
4.	10:15 to 10:30	Priyanka Priyadarshini Pruseth <i>Kasner space-time, second order hydrodynamics and gravity dual</i>
5.	10:30 to 10:45	Ankita Budhraja <i>NLL resummation of recoil-sensitive angularities using SCET</i>
6.	10:45 to 11:00	Srijit Paul <i>Calculating meson and baryon resonances from lattice QCD</i>

Neutrino Physics - II

TIME: 09:30 to 11:00 (IST)

CHAIR/HOST: **Md. Sajjad Athar**

ZOOM: **DAE-HEP-room3**

SL No.	TIME	SPEAKER AND TITLE
1.	09:30 to 09:45	Samiran Roy <i>Understanding the MiniBooNE and the muon $g - 2$ anomalies with a light Z' and a second Higgs doublet</i>
2.	09:45 to 10:00	Mainak Chakraborty <i>Baryogenesis through leptogenesis in a S_4 flavon model with TM_1 mixing for neutrinos</i>
3.	10:00 to 10:15	Soumya Bhattacharyya <i>Theory of fast flavor conversion for supernova neutrinos</i>

4.	10:15 to 10:30	Nishat Fiza <i>Exploring the new physics phases in 3 + 1 scenario in neutrino oscillation experiments</i>
5.	10:30 to 10:45	Pritam Das <i>Multi-Higgs doublet model under the framework of minimal extended seesaw</i>
6.	10:45 to 11:00	Maibam Ricky Devi <i>Discriminating Type-II, Inverse and Linear seesaw mechanisms within A_4 Flavour Symmetry</i>

PARALLEL-VIII - 11:15 to 12:45 (IST)

Standard model and beyond standard model physics - VIIA

TIME: 11:15 to 13:00 (IST)

CHAIR/HOST: **Prolay Mal**

ZOOM: **DAE-HEP-room5**

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:30	Aloke Kumar Das <i>Measurement of cross section of $pp \rightarrow t\bar{t} + \gamma$ process in lepton+jets events at $\sqrt{s} = 13$ TeV in LHC Run 2</i>
2.	11:30 to 11:45	Mintu Kumar <i>Precise measurement of the top quark mass with single top events at CMS at $\sqrt{s} = 13$ TeV</i>
3.	11:45 to 12:00	Pritam Kalbhor <i>Angular analysis of the decay $B^+ \rightarrow K^{*+} \mu^+ \mu^-$ in proton-proton collisions at $\sqrt{s} = 8$ TeV</i>
4.	12:00 to 12:15	Ipsita Ray <i>New physics in $b \rightarrow sll$ decays with complex Wilson coefficients</i>
5.	12:15 to 12:30	Soumen Halder <i>Rediscovery of $B^+ \rightarrow K^+ l^+ l^-$ at Belle II</i>
6.	12:30 to 12:45	Agnivo Sarkar <i>Aspects of Charged Higgs Boson in the 2HDM Doppelganger</i>
7.	12:45 to 13:00	Rojalin Pradhan <i>Probing Doubly and Singly Charged Higgs at pp Collider HE-LHC</i>

Cosmology and astro-particle physics - VI

TIME: 11:15 TO 12:45 (IST)

CHAIR/HOST: **Ajit Srivastava**

ZOOM: **DAE-HEP-room4**

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:30	Sundar Dhara <i>To study the Short Gamma-ray bursts(SGRBs) and evolutions of their energy flux and luminosity and Investigations of Ultra Long Short GRBs (ulSGRBs)</i>
2.	11:30 to 11:45	Divya Sachdeva <i>Constraints on Axion like particles-Lepton coupling from Big Bang Nucleosynthesis</i>
3.	11:45 to 12:00	Kausik Pal <i>Neutrino emissivity of dense quark matter in presence of magnetic field</i>
4.	12:00 to 12:15	Satyabrata Datta <i>Importance of flavour effects in right handed neutrino induced gravitational leptogenesis</i>
5.	12:15 to 12:30	Devabrat Mahanta <i>Common origin of Dark Matter and Low Scale Leptogenesis from Three Body Decay at Tree Level</i>
6.	12:30 to 12:45	Abhijit Kumar Saha <i>Soft leptogenesis in the NMSSM with a singlet right-handed neutrino superfield</i>

Relativistic heavy-ion physics & QCD - VIII

TIME: 11:15 to 12:45 (IST)

CHAIR/HOST: **Chitrasen Jena**

ZOOM: **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:45	Amruta Misra [MINI-REVIEW] <i>In-medium properties of Heavy Quarkonia</i>
2.	11:45 to 12:00	Amal Jahan CS <i>Open charm mesons in magnetized asymmetric strange hadronic matter</i>
3.	12:00 to 12:15	Surasree Mazumder <i>Collisional energy loss of heavy quark in strong magnetic field</i>
4.	12:15 to 12:30	Wadut Shaikh <i>Recent bottomonium measurements in pp, p-Pb and Pb-Pb collisions at forward rapidity with ALICE at the LHC</i>
5.	12:30 to 12:45	Sayak Chatterjee <i>Feasibility studies of J/ψ measurement with CBM detector setup at FAIR SIS100 energies</i>

Neutrino Physics - III

TIME: 11:15 to 13:00 (IST)

CHAIR/HOST: Sanjib K Agarwalla

ZOOM: **DAE-HEP-room3**

SL No.	TIME	SPEAKER AND TITLE
1.	11:15 to 11:30	Arun Kumar Soma <i>nEXO studies on neutrinoless double beta of ^{136}Xe</i>
2.	11:30 to 11:45	Mouli Chaudhuri <i>The Mitchell Institute Neutrino Experiment at Reactor (MINER)</i>
3.	11:45 to 12:00	Anil Kumar <i>A new approach to probe neutrino non-standard interactions in atmospheric neutrino experiments</i>
4.	12:00 to 12:15	Kanishka Rawat <i>Hierarchy Sensitivity with Combined Standard and Rock Muons in ICAL at India-based Neutrino Observatory</i>
5.	12:15 to 12:30	Mohammad Nizam <i>Hadron energy estimation from atmospheric neutrino events</i>
6.	12:30 to 12:45	Honey Khindri <i>Simulation study of electron energy resolution and reconstruction with thinner iron plates by using plastic scintillators in ICAL</i>
7.	12:45 to 13:00	Krishnan Rama <i>Fully constrained mass matrix: Can symmetries alone determine the flavon vacuum alignments?</i>

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PARALLEL-IX - 11:45 to 13:15 (IST)

Detectors development, future facilities and experiments, and societal applications - VII

TIME: 11:45 to 13:15 (IST)

CHAIR/HOST: **B Satyanarayana**

ZOOM: **DAE-HEP-room2**

SL No.	TIME	SPEAKER AND TITLE
1.	11:45 to 12:15	Nagendra Krishnapura [MINI-REVIEW] <i>Custom IC development for HEP applications</i>
2.	12:15 to 12:30	Suresh S Upadhyaya <i>Development of 256-pixel SiPM based Imaging Camera and its status</i>
3.	12:30 to 12:45	Kiran S Gothe <i>Development of Front-end Electronics for an SiPM Based Cherenkov Telescope Camera</i>
4.	12:45 to 13:00	Mandar Saraf <i>Fabrication, interfacing and performance of the High Voltage Bias Supply modules for ICAL RPCs</i>
5.	13:00 to 13:15	Nagaraj Panyam <i>Backend Systems for mini-ICAL</i>

Relativistic heavy-ion physics & QCD - IX

TIME: 11:45 to 13:15 (IST)

CHAIR/HOST: **Sandeep Chatterjee**

ZOOM: **DAE-HEP-room1**

SL No.	TIME	SPEAKER AND TITLE
1.	11:45 to 12:00	Pracheta Singha <i>A beyond mean-field approach to Yang-Mills thermodynamics</i>
2.	12:00 to 12:15	Ranjita Kumari Mohapatra <i>In medium properties of axion within a Polyakov loop enhanced Nambu-Jona-Lasinio model</i>
3.	12:15 to 12:30	Mahammad Sabir Ali <i>Studying explicit $U(1)_A$ symmetry breaking in hot and magnetised two flavour non-local NJL model constrained using lattice results</i>

4.	12:30 to 12:45	Sreekanth V <i>Thermal dilepton production in collisional hot QCD medium in the presence of chromo-turbulent fields</i>
5.	12:45 to 13:00	Balbeer Singh <i>Jet quenching parameter in a Polyakov loop plasma</i>
6.	13:00 to 13:15	Arvind Kumar <i>ηB interactions in the strange baryonic matter</i>

Neutrino Physics - IV

TIME: 11:45 to 13:15 (IST)

CHAIR/HOST: **D Indumathi**

ZOOM: **DAE-HEP-room3**

SL No.	TIME	SPEAKER AND TITLE
1.	11:45 to 12:15	S. Umasankar [MINI-REVIEW] <i>Long-Baseline accelerator Neutrino Experiments</i>
2.	12:15 to 12:30	Atika Fatima <i>Effect of second class currents in $\nu_l(\bar{\nu}_l) - N$ scattering</i>
3.	12:30 to 12:45	Farhana Zaidi <i>$\nu_\tau/\bar{\nu}_\tau - {}^{40}\text{Ar}$ DIS cross sections with perturbative and nonperturbative effects</i>
4.	12:45 to 13:00	Hariom Sogarwal <i>Coherent pion production in Neutrino (antineutrino)-Nucleus interaction</i>
5.	13:00 to 13:15	Sheeba Shafaq <i>Enhanced violation of Leggett-Garg Inequality in three flavour neutrino oscillations via non-standard interactions</i>