

## Session Program

12-16 Dec 2022



**DAE  
HEP  
2022**  
HOSTED BY IISER MOHALI  
DECEMBER 12TH TO 16TH

**XXV DAE-BRNS HIGH ENERGY PHYSICS SYMPOSIUM 2022**

**TOPICS**

- ASTROPARTICLE PHYSICS AND COSMOLOGY
- BEYOND THE STANDARD MODEL
- FORMAL THEORY
- FUTURE EXPERIMENTS AND DETECTOR DEVELOPMENT
- HEAVY IONS AND QCD
- HIGGS PHYSICS
- NEUTRINO PHYSICS
- QUARK AND LEPTON FLAVOUR PHYSICS
- SOCIETAL APPLICATIONS
- TOP QUARK AND EW PHYSICS

QR code linking to the symposium information.

Logos of participating institutions: IISER Mohali, TIFR, AMITY, and others.

## XXV DAE-BRNS High Energy Physics Symposium 2022

### *Plenary*

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

# Monday 12 December

11:00

## Plenary: D1-S1

**Session** |  
**Location:** IISER Mohali, LH7, Lecture Hall Complex, IISER Mohali, Sector 81, Knowledge city, SAS Nagar, Punjab, India  
|  
**Convener:** Gagan Mohanty

11:00-11:30	<b>Recent results from ATLAS and CMS</b>  <b>Speaker</b> Prof. Sanjay Swain
11:30-12:00	<b>Recent results from BaBar, Belle and Belle II</b>  <b>Speaker</b> Karim Trabelsi
12:00-12:30	<b>Recent highlights from the LHCb experiment</b>  <b>Speaker</b> Dr Abhijit Mathad
12:30-13:00	<b>Recent results from Heavy Ions experiments</b>  <b>Speaker</b> Sadhna Das

13:00

## Tuesday 13 December

09:00

### Plenary: D2-S2

**Session** |

**Location:** IISER Mohali, LH7, Lecture Hall Complex, IISER Mohali, Sector 81, Knowledge city, SAS Nagar, Punjab, India

|

**Convener:** Jasjeet Bagla

09:00–09:30

#### String Theory Circa 2022

**Speaker**

Prof. Shiraz Minwalla

09:30–10:00

#### An overview of top quark and Higgs boson measurements at the LHC

**Speaker**

Dr Arun Nayak

10:00–10:30

#### Precise, but enigmatic, 'standard' Cosmological model

**Speaker**

Prof. Tarun Souradeep

10:30

17:00

### Plenary: D2-S3

**Session** |

**Location:** IISER Mohali, LH7, Lecture Hall Complex, IISER Mohali, Sector 81, Knowledge city, SAS Nagar, Punjab, India

|

**Convener:** Dr Satyajit Jena

17:00–17:30

#### Mega Science Vision 2035 documents: NP and HEP

**Speaker**

Prof. Amol Dighe

17:30–17:40

#### Jasjeet Bagla

**Speaker**

Jasjeet Bagla

17:45–18:45

#### Panel Discussion

**Speakers**

Amol Dighe, Gagan Mohanty, Indumathi D., Jasjeet Bagla, Kajari Mazumdar, MOHAMMAD SAJJAD ATHAR, Dr Moon Moon Devi, PRAVATA MOHANTY, Prof. Sanjay Swain, Rameez Mohamed, Rukmani Mohanta, Sadhana Dash, Dr Satyajit Jena, Shashi Dugad, Vipin Bhatnagar, Dr Vishal Bhardwaj

18:55

Wednesday 14 December

09:00

Plenary: D3-S4

Session |  
Location: IISER Mohali, LH7, Lecture Hall Complex, IISER Mohali, Sector 81, Knowledge city, SAS Nagar, Punjab, India  
|  
Convener: Harleen Dahiya

09:00–09:30 The first decade of real time Multimessenger astronomy

Speaker  
Dr Mohamed Rameez

09:30–10:00  
Astroparticle physics with GRAPES-3 experiment: current status and future

Speaker  
Dr Pravata Kumar Mohanty

10:00–10:30 Recent advances in detectors

Speaker  
Peter Krizan

10:30

# Thursday 15 December

09:00

## Plenary: D4-S5

**Session** |

**Location:** IISER Mohali, LH7, Lecture Hall Complex, IISER Mohali, Sector 81, Knowledge city, SAS Nagar, Punjab, India  
|

**Convener:** Prof. Suman Bala Beri

09:00–09:30

### Dark Matter theoretical status

**Speaker**

Suchita Kulkarni

09:30–10:00

### Dark Matter experimental searches

**Speaker**

Prof. Pratik Majumdar

10:00–10:30

### Recent updates on finite temperature and density QCD from lattice

**Speaker**

Dr Sayantan Sharma

10:30

17:00

## Plenary: D4-S6

**Session** |

**Location:** IISER Mohali, LH7, Lecture Hall Complex, IISER Mohali, Sector 81, Knowledge city, SAS Nagar, Punjab, India  
|

**Convener:** Manjit Kaur

17:00–17:30

### Current Neutrino Physics: Theoretical Status

**Speaker**

Dr Rahul Srivastava

17:30–18:00

### Neutrino Physics : Current Experimental Status

**Speaker**

Prof. BIPUL BHUYAN

18:00–18:30

### India based underground experiment status

**Speaker**

D Indumathi

18:30

## Friday 16 December

09:00

### Plenary: D5-S6

**Session** |**Location:** IISER Mohali, LH7, Lecture Hall Complex, IISER Mohali, Sector 81, Knowledge city, SAS Nagar, Punjab, India

|

**Convener:** Harvinder Kaur Jassal

09:00–09:30

#### Future Colliders - Concepts and Physics Reach

**Speaker**

Sridhara Dasu

09:30–10:00

#### Science and Physics at Electron-Ion Collider

**Speaker**

Abhay Deshpande

10:00–10:30

#### Dedicated LIGO talk

**Speaker**

Anand Sengupta

10:30