

Session Program

9-13 Dec 2024

**BCVSPIN Conference 2024: Particle Physics
and Cosmology in the Himalayas**

Plenary

Kathmandu, Nepal

Monday 9 December

09:30

Plenary: 1

Session | Location: Kathmandu, Nepal | Convener: Bibhushan Shakya

09:35-10:10 The KAGRA gravitational wave project

Speaker
Takaaki Kajita

10:10-10:45 Dark Matter and Neutrino Mass from a Conformal Dark Sector

Speaker
Prof. Maxim Perelstein

10:45

11:05

Plenary: 2

Session | Location: Kathmandu, Nepal | Convener: Anjan Giri

11:05-11:40 The Path to Future Particle Physics Experiments

Speakers
Harris Kagan, Harris Kagan

11:40-12:05 Cosmic Colliders

Speaker
Bibhushan Shakya

12:05-12:30 HEP Research in Nepal: Status and Prospects

Speaker
Niraj Dhital

12:30

Tuesday 10 December

09:00

Plenary: 4

Session | **Location:** Kathmandu, Nepal | **Convener:** Suyog Shrestha

09:00–09:35

The latest and the near-future physics highlights from the ATLAS experiment

Speaker

Stefano Giagu

09:35–10:10

Latest results and near-future highlights from CMS

Speaker

Gagan Mohanty

10:10–10:45

The latest and the near-future physics highlights from the ALICE experiment

Speaker

Amrit Gautam

10:45

11:05

Plenary: 5

Session | **Location:** Kathmandu, Nepal | **Convener:** Anil Thapa

11:05–11:40

Modular Flavor Symmetries

Speaker

Michael Ratz

11:40–12:15

Modular Symmetries and Neutrino Mixing

Speaker

Prof. Mu-Chun Chen

12:15

13:45

Plenary: 6

Session | **Location:** Kathmandu, Nepal | **Convener:** Dr Sudip Jana

13:45–14:20

Flavorful Dark matter and B to K invisible excess

Speaker

Xiao-Gang He

14:20–14:55

Deciphering Neutrino Non-Standard Interactions

Speaker

Anjan Giri

14:55–15:30

Exploration of Physics beyond the Standard Model with Neutrinos

Speaker

Dr. Rukmani Mohanta

15:30

Wednesday 11 December

09:00

Plenary: 7

Session | Location: Kathmandu, Nepal | Convener: JESSICA TURNER

09:00–09:35

De Sitter Spacetime and High Frequency Gravitational Waves from String Theory

Speaker

Fernando Quevedo

09:35–10:10

Light shining through astrophysical walls

Speaker

Amol Dighe

10:10–10:45

Heavy Neutral Leptons without Prejudice

Speaker

Marta Losada

10:45

11:05

Plenary: 8

Session | Location: Kathmandu, Nepal | Convener: Brian Shuve

11:05–11:40

Overview of Dark Matter Models

Speaker

Joshua Ruderman

11:40–12:15

Dark Matter Freeze-out Beyond the WIMP Paradigm

Speaker

Jan Heisig

12:15

Thursday 12 December

09:00

Plenary: 9

Session | **Location:** Kathmandu, Nepal | **Convener:** Joseph Haley

09:00–09:35

Latest and near-future highlights from DUNE

Speaker

Dr Alessandro Minotti

09:35–10:10

Latest and near-future highlights from Belle

Speaker

Mario Merola

10:10–10:45

Highlights from the IceCube neutrino observatory

Speaker

Mohamed Rameez

10:45

11:05

Plenary: 10

Session | **Location:** Kathmandu, Nepal | **Convener:** Dr. Rukmani Mohanta

11:05–11:40

Neutrino-Dark Matter Interactions

Speaker

Bhupal Dev

11:40–12:15

Unveiling a non-trivial Temporal structure in Neutrino Emissions from SN1

Speaker

Giulia Ricciardi

12:15

13:45

Plenary: 11

Session | **Location:** Kathmandu, Nepal | **Convener:** Niraj Dhital

13:45–14:20

Electromagnetic Properties of Neutrino

Speaker

Dr Sudip Jana

14:20–14:55

Imaging the Deep Earth with Neutrinos

Speaker

Prof. Sanjib Kumar Agarwalla

14:55–15:30

What is AI, what is it not, how we use it in Physics and how it impacts... You.

Speaker

Claire David

15:30

Friday 13 December

09:00

Plenary: 12

Session | **Location:** Kathmandu, Nepal | **Convener:** Bhupal Dev

09:00–09:35

The CMB frontier: Status and prospects

Speaker

Francois BOUCHET

09:35–10:10

EIC Overview

Speaker

Daniel Tapia Takaki

10:10–10:45

FCC Overview

Speaker

Prolay Mal

10:45

11:05

Plenary: 13

Session | **Location:** Kathmandu, Nepal | **Convener:** Prof. Mu-Chun Chen

11:05–11:40

Hidden Sectors in the Early Universe and Today

Speaker

Brian Shuve

11:40–12:15

Primordial Black Holes and the Early Universe

Speaker

JESSICA TURNER

12:15

13:45

Plenary: 14

Session | **Location:** Kathmandu, Nepal | **Convener:** Michael Ratz

13:45–14:20

Quantum tunneling in curved spacetime

Speaker

Masahide Yamaguchi

14:20–14:55

Radio pulsars as the best (natural) laboratory to test aspects of fundamental physics

Speaker

Manjari Bagchi

14:55–15:30

CERN International Relations

Speaker

Luciano Musa

15:30