

Cosmic Origins and the Search for New Physics

Report of Contributions

Contribution ID: 2

Type: **not specified**

Welcome

Contribution ID: 3

Type: **not specified**

Debaprasad Maity

Contribution ID: 4

Type: **not specified**

Brief talk I

Contribution ID: 5

Type: **not specified**

Short talk II

Contribution ID: 6

Type: **not specified**

Brief talk II

Contribution ID: 7

Type: **not specified**

Brief talk IV

Contribution ID: 8

Type: **not specified**

Brief talk V

Contribution ID: 9

Type: **not specified**

Brief talk VI

Contribution ID: **10**

Type: **not specified**

Plenary 5

Contribution ID: **11**

Type: **not specified**

Short talk IV

Contribution ID: **12**

Type: **not specified**

Short talk V

Contribution ID: **13**

Type: **not specified**

Brief talk VII

Contribution ID: **14**

Type: **not specified**

Brief talk IX

Contribution ID: **15**

Type: **not specified**

Brief talk X

Contribution ID: **16**

Type: **not specified**

Brief talk XI

Contribution ID: 17

Type: **not specified**

Plenary VIII

Contribution ID: **18**

Type: **not specified**

Brief talk XII

Contribution ID: **19**

Type: **not specified**

Brief talk XIII

Contribution ID: **20**

Type: **not specified**

Brief talk XIV

Contribution ID: **21**

Type: **not specified**

Brief talk XV

Contribution ID: 22

Type: **not specified**

Plenary X

Contribution ID: 23

Type: **not specified**

Short talk IX

Contribution ID: 24

Type: **not specified**

Short talk X

Contribution ID: 25

Type: **not specified**

Brief talk XVIII

Contribution ID: 26

Type: **not specified**

Brief talk XIX

Contribution ID: 27

Type: **not specified**

Brief talk XX

Contribution ID: **28**

Type: **not specified**

Plenary XIII

Contribution ID: 29

Type: **not specified**

Short talk XII

Contribution ID: **30**

Type: **not specified**

Short talk XIV

Contribution ID: **31**

Type: **not specified**

Brief talk XXI

Contribution ID: 32

Type: **not specified**

Brief talk XXII

Contribution ID: 33

Type: **not specified**

Brief talk XXIII

Contribution ID: 34

Type: **not specified**

Brief talk XXIV

Contribution ID: 35

Type: **not specified**

Vote of thanks

Contribution ID: **36**

Type: **not specified**

Closing remarks

Friday, 23 January 2026 15:30 (10 minutes)

Contribution ID: 37

Type: **not specified**

Debaprasad Maity

Session Classification: Testing cosmic inflation with gravitational wave experiments

Contribution ID: **38**

Type: **not specified**

Exotic energy injection during cosmic dawn

Presenter: Dr PALOMARES-RUIZ, SERGIO

Session Classification: Exotic energy injection during cosmic dawn

Contribution ID: 39

Type: **not specified**

Exotic energy injection during cosmic dawn

Tuesday, 20 January 2026 14:00 (45 minutes)

Presenter: Dr PALOMARES RUIZ, Sergio

Contribution ID: 40

Type: **not specified**

Gravitational wave background from primordial magnetic field

Tuesday, 20 January 2026 14:45 (30 minutes)

Presenter: Dr SHARMA, Ramkishor

Contribution ID: 41

Type: **not specified**

Probing Extended Mass Distributions of Primordial Black Holes in NANOGrav and LVK

Tuesday, 20 January 2026 15:15 (20 minutes)

Presenter: Dr BHAUMIK, Nilanjandev

Contribution ID: 42

Type: **not specified**

Dark matters are completely dark, or WIMPy, or FIMPy : An Inflationary gravitational particle production

Tuesday, 20 January 2026 16:00 (20 minutes)

Presenter: Mr CHAKRABORTY, AYAN

Contribution ID: 43

Type: **not specified**

Implications of self-interactions of ultralight dark matter at galactic scales

Tuesday, 20 January 2026 16:20 (20 minutes)

Presenter: Dr DAVE, Bihag

Contribution ID: 44

Type: **not specified**

Loops in Cosmological Correlators

Tuesday, 20 January 2026 16:40 (20 minutes)

Presenter: Ms BHOWMICK, Supritha

Contribution ID: 45

Type: **not specified**

Warm and Noisy Cosmological Fields

Wednesday, 21 January 2026 09:30 (45 minutes)

Presenter: AMIN, Mustafa

Contribution ID: 46

Type: **not specified**

Isocurvature bounds on PBHs and non-Gaussianity

Wednesday, 21 January 2026 10:15 (45 minutes)

Presenter: GONG, Jinn-Ouk

Contribution ID: 47

Type: **not specified**

Understanding the Universe with the cosmic microwave background

Wednesday, 21 January 2026 11:30 (30 minutes)

Presenter: KHATRI, Rishi

Contribution ID: 48

Type: **not specified**

Using the early universe as a quantum laboratory

Wednesday, 21 January 2026 12:00 (30 minutes)

Presenter: PETER, Patrick

Contribution ID: 49

Type: **not specified**

Reconstructing primordial features on large scales using machine learning

Wednesday, 21 January 2026 14:00 (20 minutes)

Presenter: HOORY, Alipriyo

Contribution ID: 50

Type: **not specified**

Primordial Magnetogenesis as a Unified Origin of PBHs, Dark Matter, and Gravitational Waves

Wednesday, 21 January 2026 14:20 (20 minutes)

Presenter: MAITI, SUBHASIS

Contribution ID: 51

Type: **not specified**

Asymmetries from Primordial Black Holes

Wednesday, 21 January 2026 14:40 (20 minutes)

Presenter: LOHO, Koushik

Contribution ID: 52

Type: **not specified**

Capturing the 21-cm signal in radio interferometers

Wednesday, 21 January 2026 15:00 (20 minutes)

Presenter: ELAHI, Asif

Contribution ID: 53

Type: **not specified**

Cosmic Hum of Gravitational Waves from the Early Universe

Thursday, 22 January 2026 09:30 (45 minutes)

Presenter: MUKHERJEE, Suvodip

Contribution ID: 54

Type: **not specified**

Looking for new physics via CMB and Gravitational Waves

Thursday, 22 January 2026 10:15 (45 minutes)

Presenter: BARTOLO, Nicola

Contribution ID: 55

Type: **not specified**

Warm Inflation 2.0–The resurgence story

Thursday, 22 January 2026 11:30 (30 minutes)

Presenter: GANGOPADHYAY, Mayukh

Contribution ID: 56

Type: **not specified**

From Poles to Branch Cuts–Analytic Structure of Cosmological Correlators

Thursday, 22 January 2026 12:00 (30 minutes)

Presenter: GHOSH, Diptimoy

Contribution ID: 57

Type: **not specified**

Effects of dissipation during the accelerating epochs

Thursday, 22 January 2026 14:00 (30 minutes)

Presenter: DAS, Suratna

Contribution ID: 58

Type: **not specified**

Cosmological Dynamics of Scalar Fields in String-Motivated Models

Thursday, 22 January 2026 14:30 (30 minutes)

Presenter: ZAVALA, Ivonne

Contribution ID: 59

Type: **not specified**

Primordial Magnetogenesis with Dark Photons

Thursday, 22 January 2026 15:00 (20 minutes)

Presenter: NANDI, Debottam

Contribution ID: **60**

Type: **not specified**

Power Suppression and Lensing Anomaly - A phenomenological investigation

Thursday, 22 January 2026 16:00 (20 minutes)

Presenter: K, Roshana

Contribution ID: **61**

Type: **not specified**

Constraining the early universe with NANOGrav 15-year data

Thursday, 22 January 2026 16:20 (20 minutes)

Presenter: MAITY, Suvashis

Contribution ID: **62**

Type: **not specified**

Anomalies and tensions in cosmology

Thursday, 22 January 2026 16:40 (20 minutes)

Presenter: MUKHERJEE, Purba

Contribution ID: 63

Type: **not specified**

Gauge fields and parity violation in the early universe

Friday, 23 January 2026 09:30 (45 minutes)

Presenter: KUMAR JAIN, Rajeev

Contribution ID: 64

Type: **not specified**

Primary gravitational waves at high frequencies–Origin of suppression in the power spectrum

Friday, 23 January 2026 10:15 (45 minutes)

Presenter: MARTIN, Jerome

Contribution ID: 65

Type: **not specified**

Bayesian optimisation for efficient cosmological model selection

Friday, 23 January 2026 11:30 (20 minutes)

Presenter: MALHOTRA, Ameet

Contribution ID: 66

Type: **not specified**

The importance of being warm in the Early Universe

Presenter: CHAKRABORTY, Dibya

Contribution ID: 67

Type: **not specified**

AI/ML Techniques for Model-Independent Cosmological Analysis

Friday, 23 January 2026 12:10 (20 minutes)

Presenter: SHAH, Rahul

Contribution ID: 68

Type: **not specified**

Anchoring The Universe at Characteristic Redshifts and Measurement of the Hubble Parameter

Friday, 23 January 2026 14:00 (30 minutes)

Presenter: ANANDA SEN, Anjan

Contribution ID: 69

Type: **not specified**

Validity of separate-universe approach in transient ultraslow-roll inflation

Friday, 23 January 2026 14:30 (20 minutes)

Presenter: RAVEENDRAN, Rathul Nath

Contribution ID: 70

Type: **not specified**

Non-minimal coupling of scalar fields in the dark sector and generalization of the top-hat collapse

Friday, 23 January 2026 14:50 (20 minutes)

Presenter: SAHA, Priyanka

Contribution ID: 71

Type: **not specified**

Inflationary trispectrum of gauge fields from scalar and tensor exchanges

Friday, 23 January 2026 15:10 (20 minutes)

Presenter: SAI, Jishnu

Contribution ID: 72

Type: **not specified**

Emergence of the exponential cut-off in the spectrum of PGWs at small scales

Friday, 23 January 2026 11:50 (20 minutes)

Presenter: PAUL, Arnab