# Asia-Pacific School and Workshop on Gravitation and Cosmology 2022

#### Report of Contributions

Contribution ID: 1 Type: not specified

#### **Opening: Sang Pyo Kim**

Saturday 19 March 2022 08:50 (10 minutes)

March 14, 2025

Contribution ID: 2 Type: not specified

### Kin-Wang Ng, Search for stochastic gravitational-wave background

Saturday 19 March 2022 10:50 (25 minutes)

Session Classification: General talk

Contribution ID: 3 Type: **not specified** 

## Tanmoy Paul, Decoding the phases of early and late time reheating through imprints on primordial gravitational waves

Saturday 19 March 2022 11:15 (25 minutes)

Session Classification: General talk

Contribution ID: 4 Type: **not specified** 

#### Chan Park, Data Analysis for Multi-Channel Gravitational Wave Detectors

Saturday 19 March 2022 11:40 (25 minutes)

Session Classification: General talk

Contribution ID: 5 Type: **not specified** 

## Alberto Roper Pol, The gravitational wave signal from primordial magnetic fields in the Pulsar Timing Array frequency band

Saturday 19 March 2022 12:05 (25 minutes)

Session Classification: General talk

Contribution ID: 6 Type: **not specified** 

### Dong-Hoon Kim, A geometrical-optics analysis of light perturbed by gravitational waves

Saturday 19 March 2022 15:30 (25 minutes)

Session Classification: General talk

Contribution ID: 7 Type: **not specified** 

### Reginald Christian Bernardo, Self-tuning beyond degeneracy through the cosmic tadpole

Saturday 19 March 2022 15:55 (25 minutes)

Session Classification: General talk

Contribution ID: 8 Type: not specified

#### Hoi Lai Yu, Intrinsic Time Geometrodynamics

Saturday 19 March 2022 16:20 (25 minutes)

Session Classification: General talk

Contribution ID: 9 Type: **not specified** 

### Gen-Liang Li, Probing Dark Matter Spikes via Gravitational Waves of Extreme Mass Ratio Inspirals

Session Classification: Student talk

Contribution ID: 10 Type: not specified

### Ziming Wang, New limits on the Lorentz/CPT symmetry through fifty gravitational-wave events

Saturday 19 March 2022 16:45 (12 minutes)

Session Classification: Student talk

Contribution ID: 11 Type: not specified

#### Bikash Chandra Paul, Emergent Universe with modfied matter

Sunday 20 March 2022 10:50 (25 minutes)

Session Classification: General talk

Contribution ID: 12 Type: not specified

### Nandan Roy, Tracking Scalar Field Models and Hubble Tension

Sunday 20 March 2022 11:15 (25 minutes)

Session Classification: General talk

Contribution ID: 13 Type: not specified

### SANJAY OLI, Two-fluid Dark Energy & Dark Matter Cosmological Model in Bianchi Spacetime

Sunday 20 March 2022 11:40 (25 minutes)

Session Classification: General talk

Contribution ID: 14 Type: **not specified** 

#### Seokcheon Lee, Meaning of the speed of light in the FLRW universe

Sunday 20 March 2022 12:05 (25 minutes)

Session Classification: General talk

Contribution ID: 15 Type: not specified

#### Subhadeep Bej, Self-Gravitating Bose-Einstein Condensates as a candidate for Dark Matter

Sunday 20 March 2022 15:30 (12 minutes)

Session Classification: Student talk

Contribution ID: 16 Type: not specified

#### BARNIK NATH BHAUMIK, CAN QUANTUM GRAVITY PAVE THE WAY TO DARK ENERGY

Sunday 20 March 2022 15:42 (12 minutes)

**Session Classification:** Student talk

Contribution ID: 17 Type: not specified

## Vijay Chawan, Quasar continuum spectrum disfavors black holes with a magnetic monopole charge.

Sunday 20 March 2022 15:54 (12 minutes)

**Session Classification:** Student talk

Contribution ID: 18 Type: not specified

#### RAJESH KUMAR DUBEY, The Escalation in Hubble's Tension in the Era of Gravitational Waves

Sunday 20 March 2022 16:06 (12 minutes)

**Session Classification:** Student talk

Contribution ID: 19 Type: not specified

## Susmita Jana, Constraints on non-minimal coupling of electromagnetic fields from astrophysical observations

Sunday 20 March 2022 16:18 (12 minutes)

**Session Classification:** Student talk

Contribution ID: 20 Type: not specified

#### Simran Kaur, A study on Holographic Dark Energy model with adiabatic matter creation

Sunday 20 March 2022 16:30 (12 minutes)

Session Classification: Student talk

Contribution ID: 21 Type: not specified

#### GOWTHAM SIDHARTH M, Effect of Plasma on Shadow of Non-singular Rotating Magnetic Monopole in Perfect Fluid Dark matter

Sunday 20 March 2022 16:42 (12 minutes)

**Session Classification:** Student talk

Contribution ID: 22 Type: not specified

### Amaury Micheli, Quantum Discord & Decoherence of Inflationnary perturbations

Sunday 20 March 2022 16:54 (12 minutes)

Session Classification: Student talk

Contribution ID: 23 Type: not specified

#### Daniele Gregoris, Understanding Gravitational Entropy of Black Holes: A New Proposal via Curvature Invariants

Monday 21 March 2022 10:50 (25 minutes)

Session Classification: General talk

Contribution ID: 24 Type: not specified

### Pradyumn Sahoo, Power-law cosmology in Weyl-type f(Q,T) gravity

Monday 21 March 2022 12:05 (25 minutes)

Session Classification: General talk

Contribution ID: 25 Type: not specified

### Muhammad Sharif, Gravitational Decoupling and Modified Gravity

Monday 21 March 2022 11:40 (25 minutes)

Session Classification: General talk

Contribution ID: 26 Type: not specified

#### Nomaan X, Spacetime Entanglement Entropy of de Sitter horizons

Monday 21 March 2022 11:15 (25 minutes)

Session Classification: General talk

Contribution ID: 27 Type: not specified

### Simran Arora, Constraining effective equation of state in f(Q, T) gravity

Monday 21 March 2022 15:30 (12 minutes)

Session Classification: Student talk

Contribution ID: 28 Type: not specified

#### Panagiotis Charalambous, Black holes tidal deformation - Hidden symmetry of the tune of Love

Monday 21 March 2022 15:42 (12 minutes)

Session Classification: Student talk

Contribution ID: 29 Type: not specified

### Surojit Dalui, A tale of two phenomena: Instability and thermality in the near horizon region(cancelled)

Monday 21 March 2022 15:54 (12 minutes)

Session Classification: Student talk

Contribution ID: 30 Type: not specified

### Finnian Gray, Slowing Rotating Black Holes and Hidden Symmetries

Monday 21 March 2022 16:06 (12 minutes)

Session Classification: Student talk

Contribution ID: 31 Type: not specified

#### Misba Afrin, Testing Horndeski theory with the Event Horizon Telescope

Monday 21 March 2022 16:18 (12 minutes)

Session Classification: Student talk

Contribution ID: 32 Type: not specified

#### Masaya Amo, Asymptotic properties of null geodesics near null infinity

Monday 21 March 2022 16:30 (12 minutes)

Session Classification: Student talk

Contribution ID: 33 Type: not specified

## Saurabh Saurabh, Investigation of deviation from General relativity using semi-analytic RIAF models(cancelled)

Monday 21 March 2022 16:42 (12 minutes)

**Session Classification:** Student talk

Contribution ID: 34 Type: **not specified** 

### Sanjay Mandal, Constraint on equation of state parameter (w) in non-minimally coupled f(Q) gravity

Monday 21 March 2022 16:54 (12 minutes)

Session Classification: Student talk

Contribution ID: 35 Type: not specified

#### Shun-Pei Miao, Summing Inflationary Logarithms in Nonlinear Sigma Models

Tuesday 22 March 2022 10:50 (25 minutes)

Session Classification: General talk

Contribution ID: 36 Type: not specified

#### Yong Tian, The Acceleration Relation in Dark Matter Problem

Tuesday 22 March 2022 11:15 (25 minutes)

Session Classification: General talk

Contribution ID: 37 Type: **not specified** 

### MONCY JOHN, Exact quantum-classical correspondence of a bouncing and coasting universe

Tuesday 22 March 2022 11:40 (25 minutes)

Session Classification: General talk

Contribution ID: 38 Type: not specified

## lang liu, Testing primordial black hole and measuring the Hubble constant with multiband gravitational-wave observations

Tuesday 22 March 2022 12:05 (25 minutes)

Session Classification: General talk

Contribution ID: 39 Type: not specified

### Siddharth Kumar Sahoo, In search of magnetically charged Bardeen black holes

Tuesday 22 March 2022 15:30 (12 minutes)

**Session Classification:** Student talk

Contribution ID: 40 Type: not specified

## Ignacio Magaña Hernandez, Constraining the number of spacetime dimensions from GWTC-3 binary black hole mergers

Tuesday 22 March 2022 15:42 (12 minutes)

Session Classification: Student talk

Contribution ID: 41 Type: not specified

### Zhan-Feng MAI, Superradiant Instability of Extremal Black Holes in STU supergravities

Tuesday 22 March 2022 15:54 (12 minutes)

Session Classification: Student talk

Contribution ID: 42 Type: not specified

#### Paulami Majumder, Gyroscopic precession in the vicinity of Event Horizon

Tuesday 22 March 2022 16:06 (12 minutes)

Session Classification: Student talk

Contribution ID: 43 Type: not specified

### Chang Liu, Multiband Observations and Early Warnings of BNS and NSBH system

Tuesday 22 March 2022 16:18 (12 minutes)

Session Classification: Student talk

Contribution ID: 44 Type: **not specified** 

#### Takuya Takahashi, Axion cloud evaporation during inspiral of black hole binaries

Tuesday 22 March 2022 16:30 (12 minutes)

Session Classification: Student talk

Contribution ID: 45 Type: not specified

#### Dhong Yeon Cheong, Primordial Black Holes and GWs in Higgs-R2 Inflation

Tuesday 22 March 2022 16:42 (12 minutes)

Session Classification: Student talk

Contribution ID: 46 Type: not specified

#### Xinhao ZOU, The MIGA project

Tuesday 22 March 2022 16:54 (12 minutes)

Session Classification: Student talk