Cosmic Inflation: From Observations to Particle Models

Report of Contributions

Contribution ID: **1** Type: **not specified**

Gravitational Waves

Saturday, 18 June 2022 09:15 (45 minutes)

Presenter: KATSANEVAS, Stavros

Contribution ID: **2** Type: **not specified**

Gravitational Anomalies, torsion and potential geometric origin of the Universe Dark Sector

Saturday, 18 June 2022 10:00 (30 minutes)

Presenter: MAVROMATOS, Nikolaos (National Tech. U. Athens)

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

CMB polarization B-mode search with QUBIC and CMB-S4

Presenter: LOUCATOS, Sotiris (Irfu CEA-Saclay and APC Paris)

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

Quintessential Inflation Latest

Saturday, 18 June 2022 12:00 (30 minutes)

Presenter: DIMOPOULOS, Kostas

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

Looking for torsional modified gravity signatures in inflationary observables

Saturday, 18 June 2022 11:00 (30 minutes)

Presenter: SARIDAKIS, EMMANOUIL (National Technical University of Athens)

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

Modified Gravity Effects on Primordial Gravitational Waves

Saturday, 18 June 2022 15:30 (20 minutes)

Presenter: OIKONOMOU, Vasilis

Contribution ID: **8** Type: **not specified**

Rescaled Einstein-Hilbert Gravity: Inflation and the Swampland Criteria

In this work, a class of f(R, φ) gravity models is studied which during the inflationary era, which is the large curvature regime, result to an effective inflationary Lagrangian that contains a rescaled Einstein-Hilbert term αR in the presence of a canonical minimally coupled scalar field. The dimensionless parameter α is chosen to take values in the range $0 < \alpha < 1$ and the main motivation for studying these rescaled Einstein-Hilbert f(R, φ) gravities, is the fact that the rescaled action may render an otherwise incompatible canonical scalar field theory with the Swampland criteria, to be compatible with the Swampland criteria. As it is shown, by studying a large number of inflationary potentials appearing in the 2018 Planck collaboration article for the constraints on inflation, the simultaneous compatibility with both the Planck constraints and the Swampland criteria, is achieved for some models, and the main characteristic of the models for which this is possible, is the small values that the parameter α must take.

Primary author: GITSIS, Achilles (Aristotle University of Thessaloniki)

Presenter: GITSIS, Achilles (Aristotle University of Thessaloniki)

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

Cosmic Inflation and Gravity Waves

Saturday, 18 June 2022 12:30 (30 minutes)

Presenter: SHAFI, Qaisar

Contribution ID: **10** Type: **not specified**

de Sitter vacua, moduli stabilisation and hybrid inflation in string theory

Saturday, 18 June 2022 10:30 (30 minutes)

Presenter: LEONTARIS, George

Contribution ID: **11** Type: **not specified**

Formulating E- & T-Model Inflation in Supergravity

Saturday, 18 June 2022 14:10 (20 minutes)

Presenter: PALLIS, Constantinos (AUTH)

Contribution ID: **12** Type: **not specified**

New inflationary solutions from old ones

Saturday, 18 June 2022 14:30 (20 minutes)

Presenter: PALIATHANASIS, Andronikos (Durban University of Technology)

Contribution ID: **13** Type: **not specified**

Cosmological Hyperfluids, Torsion and Non-metricity

Saturday, 18 June 2022 14:50 (20 minutes)

Presenter: IOSIFIDIS, Damianos

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

Reduced Einstein-Hilbert action: Inflation and the Swampland criteria

Saturday, 18 June 2022 15:10 (20 minutes)

Presenter: GITSIS, Achilles (Aristotle University of Thessaloniki)

Contribution ID: **15** Type: **not specified**

TBA

Presenter: DIALEKTOPOULOS, Konstantinos

Contribution ID: **16** Type: **not specified**

Models for Freeze-in Baryogenesis

Saturday, 18 June 2022 13:00 (30 minutes)

Presenter: SPANOS, Vasilis