



Session Program

27 June 2022 to 2 July 2022



The XXIX International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2022)

Plenary

University of Ioannina (GR), Conference Centre "Karolos Papoulias"

Monday 27 June

09:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Jonathan R. Ellis

09:00–09:30 **Opening**

09:30–10:00 **Highlights of searches for long-lived particles at the LHC**

Speaker

Jeff Dandoy

10:00–10:30 **New experimental results on BSM searches from ATLAS and CMS**

Speaker

Konstantinos Theofilatos

10:30

11:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Steven Adam Abel

11:00–11:30 **The Dark Dimension and the Swampland**

Speaker

Cumrun Vafa

11:30–12:00 **From UV to IR and back**

Speaker

Claudia de Rham

12:00–12:30 **Higgs Vacuum Decay and Primordial Black Holes**

Speaker

Ruth Gregory

12:30–13:00 **Tachyons and Misaligned Supersymmetry**

Speaker

Carlo Angelantonj

13:00

14:30

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Manuel Drees

14:30–15:00 **Topological Defects, Inflation & Gravity Waves**

Speaker

Qaisar Shafi

15:00–15:30 **Dark Matter candidate particles in Supergravity based models**

Speaker

Vassilis Spanos

15:30

Tuesday 28 June

09:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Cumrun Vafa

09:00–09:30 **A unified model for solving big problems of the Standard Model**

Speaker

Nobuchika Okada

09:30–10:00 **Challenges of an accelerating universe in string theory**

Speaker

Ignatios Antoniadis

10:00–10:30 **The Gravitino and the Swampland**

Speaker

Dieter Lust

10:30

11:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** John Rizos

11:00–11:30 **Massive gravity and string theory**

Speaker

Constantin Bachas

11:30–12:00 **Supersymmetry and the muon g-2 anomaly**

Speaker

Takeo Moroi

12:00–12:30 **A challenge for the cosmological standard model**

Speaker

Prof. Subir Sarkar

12:30–13:00

Light from the dark sector: gravity, axions graviphotons and neutrinos

Speaker

Ilias Kyriasis

13:00

14:30

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Carlo Angelantonj

14:30–15:00 **Themes in Celestial CFT**

Speaker

Sabrina Pasterski

15:00–15:30

Wavefunction of the universe: Diffeomorphism invariance and field redefinitions

Speaker

Herve Partouche

15:30

Wednesday 29 June

09:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Ignatios Antoniadis

09:00–09:30

Nonthermal Dark Matter Production

Speaker

Manuel Drees

09:30–10:00

Higher-spin states of the superstring in an electromagnetic background

Speaker

Karim Benakli

10:00–10:30

Modular flavor and CP symmetry from a top-down perspective

Speaker

Hans Peter Nilles

10:30

11:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Constantin Bachas

11:00–11:30

The anapole moment of a charged lepton in softly-broken Supersymmetric QED

Speaker

Howard Haber

11:30–12:00

String-inspired Running Vacuum Inflationary Cosmologies with gravitational anomalies

Speaker

Nikos Mavromatos

12:00–12:30

New opportunities for Electroweak Baryogenesis

Speaker

Marcela Silvia Carena Lopez

12:30–13:00

Flat asymptotics, charges and dual charges - What the Cotton can do

Speaker

Marios Petropoulos

13:00

14:30

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Nikos Mavromatos

14:30–15:00

Gauge group topology and higher-form structures in quantum gravity

Speaker

Mirjam Cvetič

15:00–15:30

Causality, nonlinear supersymmetry and inflation

15:30

Speaker Emilian Dudas

Thursday 30 June

09:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Hans Peter Nilles

09:00–09:30 **Glimpses of SUSY?**

Speaker

Jonathan R. Ellis

09:30–10:00 **Gravitational Waves: observational forays into fundamental physics**

Speaker

Michalis Agathos

10:00–10:30 **New Higgs Bosons around the Corner (with and without SUSY)**

Speaker

Sven Heinemeyer

10:30

11:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Fernando Quevedo

11:00–11:30

Cosmology and Phenomenology of the Superstring derived No-Scale Flipped SU(5)

Speaker

Dimitri Nanopoulos

11:30–12:00 **Leptogenesis**

Speaker

Apostolos Pilaftsis

12:00–12:30 **Recent results from the MicroBooNE experiment**

Speaker

Xiao Luo

12:30–13:00 **Spinor-vector duality and the swampland**

Speaker

Alon Faraggi

13:00–13:30 **session end**

13:30

Friday 1 July

09:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Prof. Benjamin Allanach

09:00–09:30 Anomalies in Particle Physics

Speaker
Andreas Crivellin

09:30–10:00 Superspace approach to the M5 brane

Speaker
Laura Andrianopoli

10:00–10:30 Non-linear SUSY, Vacuum Energy and Inflation

Speaker
Fernando Quevedo

10:30

11:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Prof. Apostolos Pilaftsis

11:00–11:30 Gravitational Portals and Particle Production during Reheating.

Speaker
Keith Olive

11:30–12:00 Heavy KK Modes Hunting from Gravitational Waves

Speaker
Mariano Quiros Carcelen

12:00–12:30 Third Family Hypercharge

Speaker
Benjamin Allanach

12:30–13:00

The unreasonable effectiveness of Genetic Algorithms as a search tool in the string landscape

Speaker
Steven Adam Abel

13:00

14:30

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Mariano Quiros Carcelen

14:30–15:00 Minimal SUSY Models confront Experiment

Speaker
Carlos E.M. Wagner

15:00–15:30

Neutrino and Flavour Models, from the Planck Scale to the Electroweak Scale

15:30

Speaker Stephen F King

Saturday 2 July

10:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** George Leontaris

10:00-10:30

LHCb (in)direct searches for physics beyond the SM

Speaker

Martino Borsato

10:30

11:00

Plenary

Session | **Location:** Conference Centre "Karolos Papoulias", Main Auditorium | **Convener:** Ioannis Florakis

11:00-11:30

Precision Higgs Physics at Current and Future Colliders

Speaker

Shufang Su

Location

Conference Centre "Karolos Papoulias", Main Auditorium

11:30-12:00

A toy model of holography: sparse SYK, wormholes, and chaos

Speaker

Elena Caceres

Location

Conference Centre "Karolos Papoulias", Main Auditorium

12:00-12:30

Hints of new paths toward Unification from Flavour Physics

Speaker

Gino Isidori

Location

Conference Centre "Karolos Papoulias", Main Auditorium

12:30-13:00

Solution to EDGES anomaly with a millicharge of possible string origin

Speaker

Pran Nath

Location

Conference Centre "Karolos Papoulias", Main Auditorium

13:00-13:30

END

13:30