



# COST CA18108 Third Annual Conference - Napoli (Italy)

## Wednesday 13 July 2022

### Talks (09:00 - 11:00)

time	[id] title	presenter
09:00	[85] Welcome	AMELINO-CAMELIA, Giovanni CARMONA, Jose Manuel
09:30	[87] Testing Lorentz Invariance Violation on Observations of Energy-dependent Time Delays with Imaging Atmospheric Cherenkov Telescopes, status and outlook	CAROFF, Sami
10:20	[95] Time delays, choice of energy-momentum variables and relative locality in doubly special relativity	REYES, Maykoll
10:40	[96] Total momentum from dynamics in quantum spacetime	FABIANO, Giuseppe

### Talks (11:30 - 13:00)

time	[id] title	presenter
11:30	[90] Loop Quantum Gravity and its road to phenomenology	LIEGENER, Klaus
12:20	[91] General relativity as an effective field theory of quantum gravity	BLIXT, Daniel
12:40	[92] A QFT toy model with a minimal length	BOSSO, Pasquale

### Talks (14:30 - 16:10)

time	[id] title	presenter
14:30	[98] Phenomenological signatures of two-body decays in deformed relativity	LOBO, Iarley
14:50	[99] Geometrize and conquer: the Klein-Gordon and Dirac equations in Doubly Special Relativity	RELANCIO, Javier
15:10	[101] Quantum Euler angles and agency-dependent properties of spacetime	FRATTULILLO, Domenico
15:30	[127] On the spectral dimensionality of quantum space(time)s	TRZEŚNIEWSKI, Tomasz
15:50	[102] Generalized Uncertainty Principle or Curved Momentum Space?	WAGNER, Fabian

### Talks (16:40 - 18:00)

time	[id] title	presenter
16:40	[125] Quantum gravitational decoherence from minimal length scale	PETRUZZIELLO, Luciano
17:00	[124] Non-unitary quantum dynamics induced by deformed spacetime symmetries	D'ESPOSITO, Vittorio
17:20	[108] Momentum Gauge Fields and non-commutative space-time, Momentum Field Theory and Brane Worlds	GUENDELMAN, Eduardo
17:40	[107] Casimir effect's constraints on Quantum Gravity	FRANCHINO-VIÑAS, Sebastián

# Thursday 14 July 2022

## Talks (09:00 - 10:50)

time	[id] title	presenter
09:00	[93] Gravitational waves propagation as a probe of quantum and alternative theories of gravity	HAEGEL, Leila
09:50	[94] Gravitational-wave interferometers and possible quantum gravity signatures	SCHIOPPA, Enrico Junior
10:10	[97] Tests of general relativity with precessing black-hole-binary systems	HAMILTON, Eleanor
10:30	[100] Constraining gravity theories through the scalar induced gravitational waves from primordial black hole Poisson fluctuations	PAPANIKOLAOU, Theodoros

## Talks (11:20 - 12:50)

time	[id] title	presenter
11:20	[103] Testing gravitational models and quantum gravity proposals with Gravitational Waves	SAKELLARIADOU, Mairi
12:10	[104] Extracting cosmological dynamics from quantum gravity	ORITI, Daniele
12:30	[105] Hubble tension and quantum gravity effects	MARCIANO, Antonino

## Talks (14:30 - 16:00)

time	[id] title	presenter
14:30	[111] kappa-fields, kappa-symmetries, and kappa-states	KOWALSKI-GLIKMAN, Jerzy
15:00	[113] Quantum properties of $U(1)$ -like gauge theory on $\kappa$ -Minkowski	HERSENT, Kilian
15:20	[114] K-Braided non-commutative field theory	DI LUCA, Maria Grazia
15:40	[106] Cosmological models evolving through the Big Bang	ADAMO, Martina

## Talks (16:30 - 17:50)

time	[id] title	presenter
16:30	[126] Measuring the weight of quantum vacuum with Archimedes experiment	ALLOCCA, Annalisa
16:50	[115] Tensions in uncorrelated Baryon Acoustic Oscillations dataset	STAIKOVA, Denitsa
17:10	[118] Spherically symmetric, static spacetimes and their perturbations in the effective field theory of gravity	NAGY, Cecília
17:30	[132] Echoes from backreacting exotic compact objects	VELLUCCI, Vania

# Friday 15 July 2022

## Talks (09:00 - 10:50)

time	[id] title	presenter
09:00	[119] Testing Lorentz invariance with UHECRs in extragalactic space and Earth's atmosphere with the Pierre Auger Observatory	BONCIOLI, Denise
09:50	[120] Cross-correlations for UHECRs (and neutrinos)	URBAN, Federico
10:10	[121] Vacuum-Cherenkov radiation in UHE air showers: a way of probing Lorentz violation	DÜNKEL, Fabian
10:30	[122] Impact of LHC data on ultra-high energy cosmic-ray physics	CERCI, Salim

## Talks (11:30 - 13:00)

time	[id] title	presenter
11:30	[123] Neutrinos: messengers of quantum gravity	PALOMARES-RUIZ, Sergio
12:20	[128] Tests of Lorentz Invariance violating and other Non Standard Interaction effects with neutrino phenomenology	ANTONELLI, Vito TORRI, Marco
12:40	[130] Prospects for neutrino decoherence measurements at KM3NeT	COELHO, Joao

## Talks (14:30 - 16:10)

time	[id] title	presenter
14:30	[89] Shower formation constraints on cubic LIV parameters in quantum electrodynamics.	SATUNIN, Petr
14:50	[109] Phenomenology of time-varying neutrino masses	MARTÍNEZ-MIRAVÉ, Pablo
15:10	[88] Large Extra Dimensions and Neutrino experiments	TERNES, Christoph Andreas
15:30	[116] The role of uncertainties in quantum cosmology	RIAHI, Natascha
15:50	[117] The Quantum Field Theory of Quadratic Gravity	MENEZES, Gabriel