

**Colmo: Quantum collapse
models investigated with
particle, nuclear, atomic and
macro systems**

Report of Contributions

Contribution ID: 1

Type: **not specified**

REGISTRATION

Monday, 3 July 2023 09:30 (30 minutes)

Contribution ID: 2

Type: **not specified**

WELCOME

Monday, 3 July 2023 10:00 (30 minutes)

Contribution ID: 3

Type: **not specified**

Collapse models, an overview from the theory to the experimental endeavour

Monday, 3 July 2023 10:30 (40 minutes)

Presenter: CARLESSO, Matteo

Contribution ID: 4

Type: **not specified**

Collapse dynamics are diffusive

Monday, 3 July 2023 11:40 (40 minutes)

Presenter: DONADI, Sandro

Contribution ID: 5

Type: **not specified**

Gravity as a classical channel and its dissipative generalization

Monday, 3 July 2023 12:20 (40 minutes)

Presenter: DI BARTOLOMEO, Giovanni

Contribution ID: 6

Type: **not specified**

Improved sensitivity X-ray surveys of spontaneous wave function collapse

Monday, 3 July 2023 14:40 (40 minutes)

Presenter: PISCICCHIA, Kristian

Contribution ID: 7

Type: **not specified**

Nicola Bortolotti, Non-Commutative Quantum Gravity Models

Monday, 3 July 2023 15:20 (40 minutes)

Presenter: BORTOLOTTI, Nicola

Contribution ID: 8

Type: **not specified**

Entanglement of neutral K mesons

Monday, 3 July 2023 16:30 (40 minutes)

Presenter: DI DOMENICO, Antonio

Contribution ID: 9

Type: **not specified**

Measurement of the Bell parameter exploiting a single pair of photons

Tuesday, 4 July 2023 09:40 (40 minutes)

Presenter: AVELLA, Alessio

Contribution ID: **10**

Type: **not specified**

Quantum control and semiclassical quantum gravity

Tuesday, 4 July 2023 10:20 (40 minutes)

Presenter: DIOSI, Lajos

Contribution ID: 11

Type: **not specified**

Fundamental physics with levitated optomechanics at UCL

Tuesday, 4 July 2023 11:40 (40 minutes)

Presenter: PONTIN, Antonio

Contribution ID: 12

Type: **not specified**

A fine measurement of the Pauli Exclusion Principle with VIP-2

Tuesday, 4 July 2023 12:20 (40 minutes)

Presenter: PORCELLI, Alessio

Contribution ID: 13

Type: **not specified**

Testing Quantum Gravity with Germanium Detectors at LNGS

Tuesday, 4 July 2023 14:40 (40 minutes)

Presenter: NAPOLITANO, Fabrizio

Contribution ID: 14

Type: **not specified**

An Introduction to Causal Fermion Systems

Tuesday, 4 July 2023 15:20 (50 minutes)

Presenter: PAGANINI, Claudio

Contribution ID: 15

Type: **not specified**

Causal fermion systems and collapse

Tuesday, 4 July 2023 16:40 (50 minutes)

Presenter: FINSTER, Felix

Contribution ID: 16

Type: **not specified**

Using Talbot Nanoparticle Matter-Wave Interferometry to test Collapse Models

Wednesday, 5 July 2023 09:40 (40 minutes)

Presenter: WARDAK, Jakub

Contribution ID: 17

Type: **not specified**

The motion of an electron through vacuum fluctuations

Wednesday, 5 July 2023 10:20 (40 minutes)

Presenter: GUNDHI, Anirudh

Contribution ID: **18**

Type: **not specified**

Inflationary cosmology and dynamical collapse models

Wednesday, 5 July 2023 11:40 (40 minutes)

Presenter: GAONA REYES, José Luis

Contribution ID: 19

Type: **not specified**

Round table - discussion about experimental tests of collapse models

Wednesday, 5 July 2023 12:20 (40 minutes)

Contribution ID: 20

Type: **not specified**

Universal limit on spatial quantum superpositions with massive objects due to phonons (online)

Thursday, 6 July 2023 09:40 (40 minutes)

Presenter: HENKEL, Carsten

Contribution ID: 21

Type: **not specified**

Open quantum systems dynamics beyond Markovian description

Thursday, 6 July 2023 10:20 (40 minutes)

Presenter: VACCHINI, Bassano

Contribution ID: 22

Type: **not specified**

Superconducting devices for quantum sensing (1)

Thursday, 6 July 2023 11:40 (30 minutes)

Presenter: MANTEGAZZINI, Federica

Contribution ID: 23

Type: **not specified**

Superconducting devices for quantum sensing (2)

Thursday, 6 July 2023 12:10 (30 minutes)

Presenter: AHRENS, Felix Klaus

Contribution ID: 24

Type: **not specified**

Stochastic Ricci Flow dynamics of the gravitationally induced wave-function collapse

Thursday, 6 July 2023 14:40 (40 minutes)

Presenter: MARCIANO, Antonino

Contribution ID: 25

Type: **not specified**

Mirrored Schrödinger's cat: What CP-violating particles tell us about quantum collapse models

Thursday, 6 July 2023 15:20 (40 minutes)

Presenter: SIMONOV, Kyrylo

Contribution ID: 26

Type: **not specified**

Progress in testing collapse models using mechanical and thermal effects

Thursday, 6 July 2023 16:30 (40 minutes)

Presenter: VINANTE, Andrea

Contribution ID: 27

Type: **not specified**

Testing quantum mechanics with 16-microgram Schrödinger cat states

Friday, 7 July 2023 09:40 (40 minutes)

Presenter: FADEL, Matteo

Contribution ID: 28

Type: **not specified**

Quantum Gravity in Lab (online)

Friday, 7 July 2023 10:20 (40 minutes)

Presenter: ADDAZI, Andrea

Contribution ID: 29

Type: **not specified**

Results and perspectives of DAMA/LIBRA-phase2

Friday, 7 July 2023 11:30 (40 minutes)

Presenter: BELLI, Pierluigi

Contribution ID: 30

Type: **not specified**

Measurement in topological superconducting systems

Friday, 7 July 2023 12:10 (40 minutes)

Presenter: SHABANI, Javad

Contribution ID: **31**

Type: **not specified**

CLOSURE

Friday, 7 July 2023 12:50 (20 minutes)