

**Workshop on Testing Fundamental Physics Principles**  
**Corfu2017, 22-28 September 2017**

**Friday 22/9 2017**

Arrival Day/Registration

**Saturday 23/9 2017**

|             |                     |   |
|-------------|---------------------|---|
| 9:45-10:00  | <i>Opening</i>      | (Bassi, Curceanu, Lizzi, Mavromatos, Savvidy, Zoupanos)   |
| 10:00-10:30 | Aschieri            | Observables and Dispersion Relations in $\kappa$ -Minkowski and $\kappa$ -FRW noncommutative spacetimes |
| 10:30-11:00 | Florakis            | Supersymmetry breaking in heterotic strings and the decompactification problem                          |
| 11:00-11:30 | <i>Coffee break</i> |   |
| 11:30-12:00 | Lindstrom           | Uses of Sigma Models  |
| 12:00-12:30 | Capozziello         | Addressing the missing matter problem in galaxies through a new fundamental gravitational radius        |
| 12:30-13:00 | Martinetti          | Beyond the standard model with noncommutative geometry  |
| 13:00-16:00 | <i>Lunch break</i>  |   |
| 16:00-16:30 | Hull                | Gravity and Fundamental Physics   |
| 16:30-17:00 | Steinacker          | Emergent gravity and higher spin on the fuzzy 4-sphere  |
| 16:00-17:30 | Savvidy             | Gravity with a Linear Action and Gravitational Singularities  |
| 17:30-18:00 | <i>Coffee Break</i> |   |
| 18:00-18:30 | Chamseddine         | NCG as basis of unification   |
| 18:30-19:00 | Plauschinn          | Unwinding strings in semi-flatland  |

**Sunday 24/9 2017**

|             |                     |   |
|-------------|---------------------|---|
| 9:30-10:00  | Oriti               | The universe as a quantum gravity condensate                          |
| 10:00-10:30 | Blumenhagen         | Quantum Gravity Constraints on Large Field Inflation                  |
| 10:30-11:00 | Obers               | Non-Lorentzian Geometry in String Theory and Holography               |
| 11:00-11:30 | <i>Coffee break</i> |   |
| 11:30-12:00 | Cardoso             | A double copy for N=2 supergravity in four dimensions                 |
| 12:00-12:30 | Salati              | Dark Matter: Neptune or Vulcan?                                       |
| 12:30-13:00 | Moskal              | Searches for discrete symmetries violation in ortho-positronium decay |
| 13:00-16:00 | <i>Lunch break</i>  |   |
| 16:00-16:30 | Luo                 | Test of hypothetical forces at the micrometer and nanometer range     |
| 16:30-17:00 | Wisn-Ewing          | Testing loop quantum cosmology  |
| 17:00-17:30 | Porzio              | GINGER - Toward an experimental test of General Relativity            |
| 17:30-18:00 | <i>Coffee break</i> |   |
| 18:00-18:30 | Shao                | Analyzing local Lorentz violation with gravitational experiments      |
| 18:30-19:00 | Tan                 | Relativistic effects in atom gravimeters                              |
| 19:00-19:30 | Fiore               | Fuzzy circle and new fuzzy sphere through confining potentials a      |

**Monday 25/9 2017**

|             |                     |  |
|-------------|---------------------|--|
| 9:20-10:00  | Wetterich           | Dark Energy and Quantum Gravity ( <b>*Note start time*</b> )   |
| 10:00-10:30 | Di Domenico         | CPT, entanglement and neutral Kaons  |
| 10:30-11:00 | Hiesmayr            | New Medical Imaging by Quantum Information from Positronium Decay  |
| 11:00-11:30 | <i>Coffee break</i> |  |
| 11:30-12:00 | Mitsou              | The Quest for Magnetic Monopoles: Past, Present and Future   |
| 12:00-12:30 | Bravina             | Search for signatures of phase transitions in ultra relativistic relativistic heavy ion collisions.            |
| 12:30-13:00 | Marton              | VIP2 A high sensitivity test of the Pauli Exclusion Principle For electrons in the LNGS underground laboratory |
| 13:00-16:00 | <i>Lunch break</i>  |  |
| 16:00-16:30 | Traina              | Quantum enhanced holometer   |
| 16:30-17:00 | Gionti              | Analysis of Lorentzian sub-Planckian Cosmologies via Asymptotic Safety   |
| 17:00-17:30 | <i>Coffee break</i> |  |
| 17:30-18:00 | O'Connor            | The phase diagram of the BMN matrix  |
| 18:00-18:30 | Perez Martin        | Do Unimodular Gravity and General Relativity have the same S matrix?   |
| 18:30-19:00 | Agathos             | Tests of General Relativity with LIGO-Virgo detections   |

**Tuesday 26/9 2017**

|             |                     |  |
|-------------|---------------------|--|
| 9:30-10:10  | Nilles              | The quest for primordial tensor modes ( <b>*Note start time*</b> ) |
| 10:10-10:40 | Spallicci           | Photons in massive and non-linear theories                         |
| 10:40-11:10 | Blasone             | Quantum field theory of neutrino mixing                            |
| 11:10-11:40 | <i>Coffee break</i> |  |
| 11:40-12:10 | Kobakhidze          | Probing noncommutative spacetime with gravitational waves          |
| 12:10-12:40 | Nebot               | Probing violations of CPT with $B_d$ mesons                        |
| 12:40-13:10 | Kupriyanov          | Deformation quantization of non-geometric backgrounds in M-theory  |

*Lunch break*

**FREE AFTERNOON GREEK NIGHT**

**Wednesday 27/9**

|             |                     |  |
|-------------|---------------------|--|
| 9:30-10:00  | Piscicchia          | Testing Dynamical Reduction Models at the underground Gran Sasso Laboratory      |
| 10:00-10:30 | Kim                 | Anomalous gauge-U(1), 't Hooft mechanism, and “invisible” axion from superstring |
| 10:30-11:00 | Rizos               | On Non-Supersymmetric String Phenomenology                                       |
| 11:00-11:30 | <i>Coffee Break</i> |  |
| 11:30-12:00 | Lechtenfeld         | Pure Yang-Mills solutions on $dS_4$  |
| 12:00-12:30 | Gonzales Martin     | Quadratic gravity in first order formalism                                       |
| 12:30-13:00 | Iorio               | Quasiparticle picture from the Bekenstein bound                                  |
| 13:00-16:00 | <i>Lunch break</i>  |  |
| 16:00-16:30 | Grossardt           | Quantum matter on a classical spacetime as a fundamental theory                  |
| 16:30-17:00 | Vinante             | Experimental test of spontaneous collapse models with mechanical systems         |
| 17:00-17:30 | <i>Coffee Break</i> |  |
| 17:30-18:00 | Andriot             | Signatures of extra dimensions in gravitational waves                            |
| 18:00-18:15 | <i>Closing</i>      |  |

**Thursday 28/9****DEPARTURE**