4th IDPASC Students Workshop

Agenda – Thursday

Auditorium AD1 – Department of Physics of the University of Coimbra, Portugal

Thursday, 28th June 2018

10:00 – 10:25 Registration
10:25 – 10:30 Opening of the Workshop

10:30 – 11:20 **Keynote lecture 1: A very short introduction to BRST quantization and the Gribov gauge fixing ambiguity (45'+5', David Dudal, KU Leuven)**

11:20 – 11:40 *ttH production and Higgs-Top coupling properties at the LHC* (15'+5', Emanuel Gouveia, LIP / U. Minho)
11:40 – 12:00 *Search for flavour-changing tZ interactions in proton-proton collisions at 13 TeV with the ATLAS detector* (15'+5', Ana Peixoto, LIP / U. Minho)

12:00 – 12:30 **Transferable skills lecture 1: The scissors effect in the life of female physicists (25'+5', Débora Menezes, U. Federal de Santa Catarina)**

12:30 – 14:00 *Lunch*

14:00 – 14:50 **Keynote lecture 2: Neutrino Physics and the Deep Underground Neutrino Experiment (45'+5', Edward Blucher, University of Chicago)**

14:50 – 15:10 *Reactor antineutrino physics in SNO+* (15'+5', Stefan-Alexandru Nae, LIP / FCUL)
15:10 – 15:30 *AmBe calibration in SNO+ water phase* (15'+5', Yan Liu, Queen's University)
15:30 – 15:50 *The 136Xe neutrinoless double beta decay search with LZ* (15'+5', Paulo Brás, LIP / U. Coimbra)
15:50 – 16:10 *Measurement of Te130 Two-Neutrino Double Beta Decay Half-life with the SNO+ Experiment* (15'+5', Ana Sofia Inácio, LIP / FCUL)

16:10 – 16:30 *Coffee-break*

16:30 – 17:20 **Transferable skills lecture 2: Evolving Artificial Intelligence (45'+5', Penousal Machado, University of Coimbra)**

17:20 – 17:40 *Photometric variability of MYSOs in the VVV survey* (15'+5', Guilherme Teixeira, IA – U. Porto)
17:40 – 18:00 *MARTA readout system* (15'+5', Ricardo Luz, LIP / IST)
18:00 – 18:20 *dmEFT: A new tool to study Dark Matter* (15'+5', José Lopes, CENTRA – IST)
18:20 – 18:40 *Search for heavy fermions with the ATLAS experiment* (15'+5', Tiago Vale, LIP / U. Minho)

19:45 – 22:30 Workshop Dinner (Hotel Astória)

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Agenda – Friday

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Friday, 29th June 2018

08:30 – 09:20	**Keynote lecture 3: Phases of QCD at extremes (45'+5', Chihiro Sasaki, University of Wroclaw)**
09:20 – 09:40	*Spectral representation of lattice gluon and ghost propagators* (15'+5', Martin Roelfs, KU Leuven KULAK)
09:40 – 10:00	*Measurement of the cross section of tt quark pair decay with tau lepton in final state and lepton universality test* (15'+5', Oleksii Toldaiev, LIP / IST)
10:00 – 10:20	*Towards Holographic Pomeron* (15'+5', Artur Amorim, U. Porto)
10:20 – 10:40	*Coffee-break*
10:40 – 11:30	**Transferable skills lecture 3: Active Space Technologies: participation in scientific space missions (45'+5', Ricardo Patrício, Active Space Technologies)**
11:30 – 11:50	*$SU(2)_f$ NJL model with meson loops: the gap equation at finite temperature* (15'+5', Renan Pereira, CFisUC – U. Coimbra)
11:50 – 12:10	*Critical phenomena in gravitational collapse* (15'+5', Isabel Suárez Fernández, CENTRA – IST)
12:10 – 12:30	*Holographic gravitational waves* (15'+5', Thanasis Giannakopoulos, IST)
12:30 – 14:00	*Lunch*
14:00 – 14:50	**Keynote lecture 4: Neutron stars, gravitational waves, and the nuclear equation of state (45'+5', Francesca Gulminelli, LPC Caen)**
14:50 – 15:10	*Testing General Relativity: matter in action!* (15'+5', Lorenzo Annulli, IST)
15:10 – 15:30	*Light ring stability in ultra-compact objects* (15'+5', Pedro Cunha, IST / U. Aveiro)
15:30 – 15:50	*Astrophysical Signatures of Scalar Fields* (15'+5', Miguel Ferreira, IST)
15:50 – 16:10	*Coffee-break*
16:10 – 16:30	*Charged particle collisions as a way to extract energy from rotating electrovacuum black holes* (15'+5', Filip Hejda, CENTRA – IST)
16:30 – 16:50	*Influence of intrinsic spin in the formation of singularities for inhomogeneous dust space-times* (15'+5', Paulo Luz, IST / U. Minho)
16:50 – 17:10	*Generalized hybrid metric-Palatini gravity* (15'+5', João Rosa, IST)
17:10 – 17:30	*Beyond the Standard Model: Neutrinos, Muon g-2 and Extra Matter* (15'+5', Luís Cebola, CFTP – IST)
17:30	**Farewell**