

VIIIth Iberian Cosmology Meeting 2-4 April 2012, Lisbon

1st Day: 2 April 2012

11:00 -- 12:30 [Registration](#)

12:30 -- 14:10 [Lunch Break](#)

14:10 -- 14:20 [Opening](#)

Chairperson: Ruth Lazkoz

14:20 -- 14:40 **M.A. Perez-Garcia** (Salamanca) *"Testing modification of fundamental constants with the EOS in Neutron stars"*

14:40 -- 15:00 **J. Casanellas** (CENTRA) *"Using stars as cosmological tools: from dark matter to alternative theories of gravity"*

15:00 -- 15:20 **F. Capranico** (ARI, Heidelberg) *"Parameter estimation biases from intrinsic alignments"*

15:20 -- 15:40 **A. Garzilli** (SISSA) *"The intergalactic medium thermal history at redshift $z=1.7-3.2$ from the Lyman alpha forest: a comparison of measurements using wavelets and the flux distribution"*

15:40 -- 16:00 **Marta Silva** (CENTRA) *"Probing the Epoch of Reionization with intensity mapping of molecular and fine structure lines"*

16:00 -- 16:30 Coffee Break

16:30 -- 16:50 **S. Nadathur** (Bielefeld) *"The ISW effect of cosmic superstructures"*

16:50 -- 17:10 **M. Zumalacarregui** (Barcelona) *"Tension in the void: New constraints on inhomogeneous cosmologies"*

17:10 -- 17:30 **D. Alonso** (IFT, UAM) *"Halo abundances and background shear in void models"*

17:30 -- 17:50 **H. Velten** (Bielefeld) *"The Λ CDM model"*

17:50 -- 18:10 **A. Montiel** (Basque Country) *"Observational constraints including gamma ray bursts for a matter-dominated model by bulk viscosity"*

19:00 [Public Talk](#)

Pedro Gil Ferreira (Oxford) *"O principio do Tempo"*

2nd Day: 3 April 2012

Chairperson: Mar Bastero-Gil

09:00 -- 09:20 **Ruth Lazkoz** (Basque Country) *"Impact of high redshift SNeIa from CANDELS+CLASH program on dark energy constraints"*

09:20 -- 09:40 **A. Bueno Belloso** (UAM/CSIC) *"Using galaxy pairs as cosmological tracers"*

09:40 -- 10:00 **V. Gammaldi** (Complutense) *"Detection of branon dark matter with gamma ray telescopes"*

10:00 – 10:20 P. Vielzeuf (CAUP) *"Probing dark energy beyond $z=2$ with CODEX"*

10:20 – 10:40 A. M. Monteiro (CAUP) *"Constraints on the CMB temperature-redshift dependence from SZ and distance measurements"*

10:40 – 11:00 M. Manera (Portsmouth) *"3D clustering of Boss DR9 Galaxies"*

11:00 – 11:30 Coffee Break

11:30 – 12:00 A. Maroto (Complutense) *"Dark energy and cosmic magnetic fields: electromagnetic relics from inflation"*

12:00 – 12:20 A. Rozas Fernandez (Portsmouth) *"Playing in the dark: simple toy models for Unified Dark Matter with fast transition"*

12:20 – 12:40 A. Macorra (UNAM) *"BDM dark matter"*

12:40 – 13:00 D. Bettoni (SISSA) *"Non-minimally coupled dark matter: effective pressure and structure formation"*

13:00 – 14:30 Lunch Break

Chairperson: Jorge Paramos

14:30 – 15:00 Orfeu Bertolami (FCUP) *"The first circle"*

15:00 – 15:20 M. Oliveira (CAUP) *"Cosmic String Evolution with a Conserved Charge"*

15:20 – 15:40 D. Figueroa (Helsinki) *"Gravitational Waves from the evolution of Cosmic Defects"*

15:40 – 16:00 T. Meriniemi (Helsinki) *"Gravitational Waves from Fermions"*

16:00 – 16:30 Coffee Break

16:30 – 16:50 J. Fonseca (Portsmouth) *"Tilted Ekpyrosis"*

16:50 – 17:10 R. Cerezo (Granada) *"Bulk viscous effects on warm inflation"*

17:10 – 17:30 A. Alho (Minho) *"Homogenization in scalar field cosmologies: a perturbative and qualitative analysis"*

17:30 – 17:50 A. Rumsey (Lancaster) *"Thermal Inflation with an Inflaton Mass Coupled to a Light Auxiliary Scalar Field"*

17:50 – 18:10 Santos Nuñez Jareño (Complutense) *"Coherent vector-field oscillations in an expanding universe"*

20:00 [Conference Dinner](#)

3rd Day: 4 April 2012

Chairperson: Tiago Barreiro

09:10 – 09:40 J. Sande Lemos (CENTRA) *"Black holes, regular black holes and*

quasiblack holes: the inside story

09:40 – 10:00 V. Vitagliano (CENTRA) *"Dynamical cosmological black holes with varying couplings and their apparent horizons"*

10:00 – 10:20 A. Cruz-Dombriz (Cape Town & Complutense) *"Covariant gauge-invariant perturbations in multifluid fourth order gravity"*

10:20 – 10:40 J.C. Bueno Sanchez (Complutense) *"The stochastic vector curvaton"*

10:40 – 11:00 M. LeDelliou (CAAUL) *"Separating expansion from collapse in spherically symmetric models with anisotropic pressure"*

11:00 – 11:30 Coffee Break

11:30 – 11:50 G. Olmo (Valencia) *"Metric-Palatini $f(R)$ theories compatible with local constraints and cosmic speedup"*

11:50 – 12:10 P. Jimeno Romero (Complutense) *"Kerr-Newman Black Holes in $f(R)$ theories"*

12:10 – 12:30 Paulo Santos (U. Oslo) *"Tower of massive scalar fields"*

12:30 – 12:50 M. Bouhmadi Lopez (CENTRA) *"The holographic induced gravity model with a Ricci dark energy: smoothing the little rip and big rip through Gauss-Bonnet effects?"*

12:50 – 14:30 Lunch Break

Chairperson: Paulo Moniz

14:30 – 14:50 T. Koivisto (Oslo) *"Nonsingular cosmologies in improved gravity"*

14:50 – 15:10 Mar Bastero-Gil (Granada) *"Baryogenesis through dissipative effects"*

15:10 – 15:30 A. Martins (IPFN, IST) *"Dynamics of perfect fluids in nonminimally coupled gravity"*

15:30 – 15:50 C. Escamilla Rivera (Basque Country) *"A tensor instability in the Eddington-Born-Infeld Theory of Gravity"*

15:50 – 16:10 Jorge Paramos (IPFN, IST) *"Mimicking Cluster Dark Matter with a non-minimal coupling: the case of Abell A586"*

16:10 – 16:40 Coffee Break

16:40 – 17:00 F. Coelho (Aveiro) *" n -DBI Gravity"*

17:00 – 17:20 A. França (Munich) *"Classicalization and the Vainshtein Mechanism"*

17:20 – 17:40 C. Bastos (IPFN, IST) *"Entropic Gravity and Phase Space Noncommutativity"*

17:40 – 18:00 S. Robles Perez (EEBM) *"Inter-universal entanglement"*

18:00 – 18:20 A. Alonso Serrano (IFF/CSIC) *"Decoherence in an accelerated universe"*

18:20 Closing