



### Giambiagi Winter School on Cosmology (17-28 July 2023) Poster Presenters

# **DARK MATTER**

ARMALEO Manuel Juan	Probing spin-2 ULDM with pulsars and gravitational waves detectors
CASTIBLANCO ORTIGOZA Elian Brayan	Thermal leptogenesis in the type-I Dirac seesaw extension to the DFSZ axion model for dark matter
CRESPI Valentina	Study of dark matter dinamical friction on compact-objects binaries
FERREIRA CHASE Esteban Tomás	Testing ultralight vector dark matter using cosmological data
GÓMEZ CRUZ Nicolás	Leptophilic U(1) extension to the standard model of particle physics with astrophysics phenomenology
LONGAS BEDOYA Robinson	Singlet fermion dark matter and Dirac neutrinos from Peccei-Quinn symmetry
MARTÍNEZ LOBO Nicolás Jhan	Particle-like solutions in the generalized SU(2) Proca theory
MEDINA ZARATE Luis Jorge	Constraining the Dark Sector Interaction of the Universe Using Cosmological Observations
MESTRE Federico Martín	Modelling the formation of the GD-1 stellar stream inside a host with a fermionic dark matter core-halo distribution
ZERBO Candela María	Exploring Feedback Processes in EAGLE Galaxies: The Role of Effective Yields

# **DARK ENERGY AND MODIFIED GRAVITY**

ALVA MORALES Manuel	Cosmological dynamics of vector-like dark energy
GONZALEZ-ESPINOZA Manuel	Odd-parity perturbations in the most general scalar-vector-tensor theory
MIRANDA CARRION Karim Gabriel	Accelerated constraints on Dark Scattering

Cosmological constraints on the \$R^2\$-corrected Appleby-Battye model

# LARGE SCALE STRUCTURE

ANIL KUMAR Neha	Reconstructing patchy helium reionization with the kSZ effect
BADARACCO Belen Marina	X-ray binary feedback over the interstellar and intergalactic media
BENEVIDES DE CARVALHO R MOTTA Pablo Cesar	Photometric classification of quasars from DES and photo-z estimation with Machine Learing
BIZARRIA Benedito Bruno	Exploring the HI-optical cross-correlations with the BINGO telescope: a first investigation
CALISKAN Mesut	Probing dark matter halos through gravitational wave lensing using Laser Interferometer Space Antenna
CARVALHO Lautaro	Cosmic Rays at the Epoch of Reionizatio
CATALDI Anselmo Pedro	Redshift evolution of the dark matter haloes shapes
CRISNEJO Sebastián Gabriel	Perturbative and numerical approach to plasma strong lensing
DADIANI Ekaterine	Properties and Morphology of Dual AGN in the ASTRID Simulation at $z=2$
FERREIRA Paula	Angular Correlation Function from sample covariance with BOSS and eBOSS LRG
FRANCO Nascimento Camila	Isotropy in the Local Universe and the Local Cosmic Void
LIMA DE OLIVEIRA Caio	Building Cluster Weak Lensing Likelihoods with Kernel Density Estimation
PEÑA Alejandro Greco	The Effect of Non-Gaussian Primordial Perturbations on Large-Scale Structure
SIERRA Porta David	Results from Visual Inspection of Bright Galaxies in the DESI Survey Validation stage
TAPIA BENAVIDES Izamar Brenda	Halo-Galaxy connection and its impact on large-scale analysis.
TOMASSINI Cecilia	Chemical evolution of galaxy baryons as a function halo mass in cosmological simulations

# EARLY UNIVERSE

ALVAREZ Diego Pedro	A larger value for $H_0$ by an evolving gravitational constant within unconventional supersymmetric models
CABELLO FUENTES Sebastian Juan	Consequences of non-Gaussianities in the Abundance of Primordial Black Holes
DEHGHANIZADEH Amirhossein	The Art of Avoiding Singularities
DEMÉTRIO Felipe Luiz	Non-adiabatic vacuum prescription for a Bianchi I background
ESPINAL VALLADARES Arnaldo Misael	Cosmic Inflation Process and the Primordial Perturbation Spectrum
FERREIRA Curado Matheus	Non-Perturbative Superfluid Free Energy and Phase Transition
FERREIRA Curado Matheus LEON GARCIA Gabriel	Non-Perturbative Superfluid Free Energy and Phase Transition Inflation without inflaton in unimodular gravity
FERREIRA Curado Matheus LEON GARCIA Gabriel LECHUGA SOLIS Laura Rosa Laura	Non-Perturbative Superfluid Free Energy and Phase Transition Inflation without inflaton in unimodular gravity Eternal inflation problem and quantum collapse theories
FERREIRA Curado Matheus LEON GARCIA Gabriel LECHUGA SOLIS Laura Rosa Laura OCAMPO Miguel Martín	Non-Perturbative Superfluid Free Energy and Phase Transition Inflation without inflaton in unimodular gravity Eternal inflation problem and quantum collapse theories Primordial Power Spectrum from an objective collapse mechanism: The simplest case

#### STATISTICAL METHODS AND MACHINE LEARNING

CHANTADA Tomás Augusto	Cosmology-informed neural networks to solve the background dynamics of the Universe
COSTANZA María Belén	Wiener Filter for cosmic microwave background maps using neural networks and power spectrum estimation.
GOMEZ BACHAR Javier Luca	Cosmological solutions of alternative gravity theories with neural networks
LEIZEROVICH Matías	Applying tension metrics to the determination of cosmological parameters
TEIXEIRA Da Silva Moreira Gabriel	Photometric redshifts probability density estimation from Recurrent Neural Networks

# **H0 TENSION**

CONCHA VALDEZ Andres Gustavo Andres Constraining über gravity with recent observations and elucidating the \$H\_0\$ problemGARCIA-ARROYO GabrielaSelf interacting neutrinos

# COSMIC RAYS AND GRAVITATIONAL WAVES

BARRIGA DELGADILLO Gabriel Francisco	Gravitational waves and the anomalous propagation of the polarization as observational evidence for torsion	
CABA Rubi Thara	The multi-messenger astrophysics approach and the MAGIC telescopes	
MORAES LUIZ LUCCHINI Felipe Moraes Luiz André Felipe	Gravitational perturbations of black holes with spherical symmetry	
COSMIC MICROWAVE BACKGROUND		
KOZAMEH Augusto Nicolas		
	On the lack of Large-Angle TT Correlations in Planck Data	
MUROKOSHI Tamaki	On the lack of Large-Angle TT Correlations in Planck Data Map-based studies on how the CMB shadow degrades tensor-to-scalar ratio measurements and how to mitigate it	