

**Latin American Workshop on Observational Cosmology (Dec. 14 - 18, 2020)
@ ICTP-SAIFR Schedule. Please notice that times are shown in local time in São
Paulo, Brazil (Brasilia time, GMT-3)**

Participants should watch the pre-recorded talks beforehand in order to take advantage of the discussion sessions. You must open the videos in a new tab.

Each day there will be 2 discussion sessions of 1h. Each discussion session will start with a very short (~ 2 min) summary from each talk and should briefly introduce the faces of the poster session speakers.

Discussion sessions will take place on Zoom (see link on webpage) and will be recorded. By connecting you are automatically giving your permission, unless you veto it explicitly by sending an email to: rogerio.rosenfeld@unesp.br

Dec. 14, Monday

1st discussion session: 11:00-12:00 (Brasilia time)

Chair: Pedro Ferreira

- Martin Crocce - Galaxy clustering in imaging surveys; DES as case example [\[VIDEO\]](#)-[\[PDF\]](#)
- Jorge Noreña - Learning about inflation from the three-point function [\[VIDEO\]](#) - [\[PDF\]](#)
- Oliver Friedrich – A way beyond 2-point statistics in the analyses of large scale structure [\[VIDEO\]](#) - [\[PDF\]](#)
- Joseph Kuruvilla - Three-point Gaussian streaming model and the cosmological information content in three-point velocity statistics [\[VIDEO\]](#) - [\[PDF\]](#)

Posters:

- Caroline Guandalin (Relativistic Effects in the Halo Two-Point Statistics) [\[VIDEO\]](#) - [\[PDF\]](#)
- Guilherme Brando de Oliveira (Relativistic Effects in the Growth of Structure) [\[VIDEO\]](#) - [\[PDF\]](#)
- Henrique Rubira (The Effective Field Theory and Perturbative Analysis for Log-Density Fields)
- Thiago Mergulhão [\[VIDEO\]](#)-[\[PDF\]](#)

2nd discussion session: 14:00-15:00 (Brasilia time)

Chair: Chris Hirata

- Licia Verde - Precision cosmology and blind watchers of the sky [\[VIDEO\]](#)
- Jaime Ernesto Forero-Romero - The beta-skeleton view of the cosmic web [\[VIDEO\]](#)-[\[PDF\]](#)
- David Valls-Gabaud - Cosmology with the MESSIER Surveyor

Posters:

- Mark Neyrinck (Intergalactic filaments spin); [\[VIDEO\]](#) - [\[PDF\]](#)
- John Suárez-Pérez (From the β -skeleton to the Cosmic Web) [\[VIDEO\]](#) - [\[PDF\]](#)
- Garima Chauhan (The HI velocity function: a test of cosmology or baryon physics?) [\[VIDEO\]](#) - [\[PDF\]](#)
- David Sierra Porta (Using Pair Inverse Probability weighting to unbiased DESI measurements)

Dec. 15, Tuesday

1st discussion session: 11:00-12:00 (Brasilia time)

Chair: Cora Dvorkin

- David Spergel - Determining the Universe's Initial Conditions [\[VIDEO\]](#)
- Alex Drlica-Wagner - Small Galaxies, Big Science: Fundamental Physics from the Faintest Galaxies [\[VIDEO\]](#)
- Farinaldo Queiroz - Light Dark Matter: A Common Solution to the Lithium and H_0 Problems [\[VIDEO\]](#)

Posters:

- Guillermo Abellan (Hints for decaying dark matter from S_8 measurements)
- José Luis Bernal (Strategies to Detect Radiation from Dark Matter Decays as Interloper of Line-Intensity Mapping Surveys)
- Sunayana Bhargava (New evidence for the 3.5-keV feature in clusters is inconsistent with a dark matter origin) [\[VIDEO\]](#) - [\[PDF\]](#)
- Joaquin Sureda (Primordial black holes with extended mass distributions as dark matter)

2nd discussion session: 14:00-15:00 (Brasilia time)

Chair: Rogerio Rosenfeld

- Carlos Frenk - A conclusive test of the validity of the cold dark matter model [\[VIDEO\]](#)
- Ginevra Favole - Multi-tracer cosmology through the lens of SHAM [\[VIDEO\]](#) - [\[PDF\]](#)
- Maria Celeste Artale - The galaxy-dark matter halo connection: predictions from hydrodynamical simulations [\[VIDEO\]](#) - [\[PDF\]](#)

Posters:

- Daniela Galárraga-Espinosa (Properties of gas phases around cosmic filaments at $z = 0$ in the Illustris-TNG simulation) [\[VIDEO\]](#) - [\[PDF\]](#)
- Marion Ullmo (Encoding large scale cosmological structure with Generative Adversarial Networks)
- Federico Tosone (A new scheme for semi-analytical Lagrangian simulations) [\[VIDEO\]](#) - [\[PDF\]](#)

Dec. 16, Wednesday

1st discussion session: 11:00-12:00 (Brasilia time)

Chair: Jorge Noreña

- Roman Scoccimarro - TBA
- Matteo Biagetti - The Persistence of Large Scale Structures [\[VIDEO\]](#) - [\[PDF\]](#)
- Celine Gouin - Probing the environment of galaxy clusters. From cluster core to cosmic filaments [\[VIDEO\]](#)
- Nicola Malavasi - The relative effect of nodes and filaments of the cosmic web on the quenching of galaxies and the orientation of their spin [\[VIDEO\]](#) - [\[PDF\]](#)

Posters:

- Rodrigo Voivodic (The Halo Void (Dust) Model of Large Scale Structure)
- Marco Marinucci (Cosmological informations using Consistency Relations of LSS)
- Jose David Peñaranda Rivera (Superclusters from velocity divergence fields) [\[VIDEO\]](#) - [\[PDF\]](#)

2nd discussion session: 14:00-15:00 (Brasilia time)

Chair: Nelson Padilla

- Miguel Quartin - First measurements of the intrinsic CMB dipole [\[VIDEO\]](#) - [\[PDF\]](#)
- Claudia Scoccola - Current status of the QUBIC experiment [\[VIDEO\]](#)-[\[PDF\]](#)
- Marian Douspis - Cosmology with SZ clusters [\[VIDEO\]](#) - [\[PDF\]](#)
- Hideki Tanimura - Detection of the kinetic Sunyaev-Zel'dovich effect in galaxy clusters [\[VIDEO\]](#) - [\[PDF\]](#)

Posters:

- Caner Unal (Small Scales of Inflationary Fluctuations and Conclusive Results about PBH above Solar Mass via Next Generation Pulsar Timing Arrays + CMB Distortions)
- María Pía Piccirilli (The continuous spontaneous localization model at second order in the primordial power spectrum: imprints on the CMB.)
- Raul Antonio Ortiz Henriquez (CMB spectral mu-distortion during phase transition in the Bound Dark Matter model)

Dec. 17, Thursday

1st discussion session: 11:00-12:00 (Brasilia time)

Chair: Miguel Quartin

- Daniel Holz - Some recent results in gravitational-wave astrophysics [\[VIDEO\]](#)
- Pedro Ferreira - Constraining Dark Energy with Black Hole Ringdown [\[VIDEO\]](#)

Posters:

- Clecio De Bom (A new dark siren measurement of the Hubble constant from O3 LIGO/Virgo gravitational wave events)
- Hector Hortua (Constraining the Reionization History using Bayesian Normalizing Flows) [\[VIDEO\]](#) - [\[PDF\]](#)

2nd discussion session: 14:00-15:00 (Brasilia time)

Chair: Mustapha Ishak

- Elisabeth Krause - Large Scale Structure Cosmology in the Systematics-Limited Regime [\[PDF\]](#)
- Dante Paz - Cosmic Voids as cosmological laboratories [\[VIDEO\]](#) - [\[PDF\]](#)
- Alexandra Amon - Robust analysis of the Dark Energy Survey Year 3 data

Posters :

- Natalí Soler Matubaro de Santi (Improving Covariance Matrices using Machine Learning) [\[VIDEO\]](#) - [\[PDF\]](#)
- Xiaoju Xu (Dissecting and Modeling Galaxy Assembly Bias) [\[VIDEO\]](#) - [\[PDF\]](#)
- Isabela Santiago de Matos (Gravitational wave propagation in $f(R)$: parametrizations and observational constraints)
- Diego Andres Torres Guarin (Cosmic Web Complexity) [\[VIDEO\]](#) - [\[PDF\]](#)

Dec. 18, Friday

Chair: Ariel Sanchez

1st discussion session: 11:00-12:00 (Brasilia time)

- Marc Kamionkowski - TBA
- Luca Amendola - Measuring $H(z)$ without assuming a cosmology
- Mustapha Ishak-Boushaki - Testing General Relativity in Cosmology [[VIDEO](#)] - [[PDF](#)]
- Martin Makler - Strong Lensing Constraints on Cosmology and Modified Gravity [[VIDEO](#)]

Posters:

- Ricardo Gomes (Nonlinear dynamics of gravitational scalar perturbations in preheating: a case for non-minimal coupled scalar field) [[VIDEO](#)] - [[PDF](#)]
- Sergio Joras (Thermodynamics of $f(R)$ Theories of Gravity)
- Albin Joseph (Exact Solutions of Dynamic Variables in FRW Universe and Reconstruction of Scalar Field Potential) [[VIDEO](#)] - [[PDF](#)]

2nd discussion session: 14:00-15:00 (Brasilia time)

Chair: Rogerio Rosenfeld

- Chris Hirata - Calibrating detectors for precision cosmology ([VIDEO](#))
- Benjamin Wandelt - TBA
- Matias Zaldarriaga - TBA
- Ariel Sanchez - Let us bury the prehistoric h : arguments against using Mpc/h units in cosmology [[VIDEO](#)]-[[PDF](#)]

Posters:

- Beatriz Tucci (Spin Bias: from Theory to Observations)
- María Valentina Garcia-Alvarado (The cosmic web through the lens of graph entropy) [[VIDEO](#)] - [[PDF](#)]
- Anthony Bonnaire (Learning the principal graph of the galaxy distribution) [[VIDEO](#)] - [[PDF](#)]
- Unnikrishnan Sureshkumar (Which galaxy property traces its clustering better: results using marked statistics)