

New Physics from Galaxy Clustering III

Report of Contributions

Contribution ID: 1

Type: **not specified**

PT/EFT approach to Large-Scale Structure formation

Monday 4 November 2024 11:00 (45 minutes)

Presenter: VLAH, Zvonimir (IRB, Zagreb)

Contribution ID: 2

Type: **not specified**

Dark radiation: from theory to observations

Monday 4 November 2024 11:45 (45 minutes)

Presenter: GARNY, Mathias (Technical University of Munich)

Contribution ID: 3

Type: **not specified**

Signatures of heavy particles in primordial non-Gaussianities

Monday 4 November 2024 14:30 (45 minutes)

[remote talk]

Presenter: BODAS, Arushi (Fermilab and University of Chicago)

Contribution ID: 4

Type: **not specified**

Refining the nonlinear modelling of primordial oscillatory features

Monday 4 November 2024 16:00 (10 minutes)

Presenter: BARBIERI, Nicola (University of Ferrara)

Session Classification: Short Talks 1

Contribution ID: 5

Type: **not specified**

Connecting field-level and summary statistics

Presenter: NIKOLAC, Ivana (Max Planck Institute for Astrophysics)

Session Classification: Short Talks 1

Contribution ID: 6

Type: **not specified**

Constraining mixed dark matter scenarios with the help of isocurvature perturbations

Monday 4 November 2024 16:10 (10 minutes)

Presenter: CELIK, Safak (Max Planck Institute for Astrophysics)

Session Classification: Short Talks 1

Contribution ID: 7

Type: **not specified**

On constraining cosmology at the level of the field with a bootstrap approach

Monday 4 November 2024 16:20 (10 minutes)

Presenter: PERON, Matteo (University of Parma)

Session Classification: Short Talks 1

Contribution ID: 8

Type: **not specified**

Nonlinear galaxy clustering in massive neutrino cosmologies

Monday 4 November 2024 16:30 (10 minutes)

Presenter: VERDIANI, Francesco (SISSA Trieste)

Session Classification: Short Talks 1

Contribution ID: 9

Type: **not specified**

Towards an optimal marked correlation function analysis for the detection of modified gravity

Monday 4 November 2024 16:50 (10 minutes)

Presenter: KÄRCHER, Martin (LAM and CPT, Marseille)

Session Classification: Short Talks 1

Contribution ID: **10**

Type: **not specified**

DESI and weak lensing with the EFT of LSS

Tuesday 5 November 2024 09:45 (45 minutes)

Presenter: CHEN, Shi-Fan (Institute for Advanced Study)

Contribution ID: 11

Type: **not specified**

Axion-induced patchy screening of the CMB

Tuesday 5 November 2024 11:00 (45 minutes)

Presenter: MONDINO, Cristina (Perimeter Institute)

Contribution ID: 12

Type: **not specified**

Cosmology from the Lyman-alpha forest

Presenter: DE BELSUNCE, Roger (LBNL / UC Berkeley)

Session Classification: Short Talks 2

Contribution ID: 13

Type: **not specified**

Simulation-based inference for higher-order galaxy clustering statistics

Tuesday 5 November 2024 11:45 (10 minutes)

Presenter: TUCCI, Beatriz (Max Planck Institute for Astrophysics)

Session Classification: Short Talks 2

Contribution ID: 14

Type: **not specified**

Optimal statistics to measure non-local primordial non-Gaussianities

Tuesday 5 November 2024 11:55 (10 minutes)

Presenter: MARINUCCI, Marco (University of Padova)

Session Classification: Short Talks 2

Contribution ID: 15

Type: **not specified**

The effective speed of sound in the EFTofLSS

Tuesday 5 November 2024 12:05 (10 minutes)

Presenter: NASCIMENTO, Caio (University of Washington)

Session Classification: Short Talks 2

Contribution ID: 16

Type: **not specified**

Unequal-time correlators

Tuesday 5 November 2024 14:30 (10 minutes)

Presenter: VANZAN, Eleonora (Tel Aviv U and Ben-Gurion U)

Session Classification: Short Talks 3

Contribution ID: 17

Type: **not specified**

Cosmology with higher order correlation function of LSS

Tuesday 5 November 2024 14:40 (10 minutes)

Presenter: SPEZZATI, Francesco (University of Padova)

Session Classification: Short Talks 3

Contribution ID: **18**

Type: **not specified**

Modeling halo statistics with the evolution mapping approach

Tuesday 5 November 2024 14:50 (10 minutes)

Presenter: FIORILLI, Andrea (MPI for Extraterrestrial Physics)

Session Classification: Short Talks 3

Contribution ID: 19

Type: **not specified**

EFT description of Lyman-alpha forest - halo cross-correlations

Tuesday 5 November 2024 15:00 (10 minutes)

Presenter: CHUDAYKIN, Anton (Université de Genève)

Session Classification: Short Talks 3

Contribution ID: 20

Type: **not specified**

How the trees lean: Toward Lyman-alpha forest skew spectra

Tuesday 5 November 2024 15:10 (10 minutes)

Presenter: SULLIVAN, Jamie (MIT)

Session Classification: Short Talks 3

Contribution ID: 21

Type: **not specified**

Bayesian field-level inference of local primordial non-Gaussianity in next-generation galaxy surveys

Presenter: ANDREWS, Adam (INAF OAS Bologna)

Session Classification: Short Talks 3

Contribution ID: 22

Type: **not specified**

Discussion session 1: BSM signals in LSS (Theory)

Tuesday 5 November 2024 16:00 (1 hour)

Presenters: SEFUSATTI, Emiliano (INAF - Oss. Astronomico di Trieste); D'AMICO, Guido (University of Parma); LEWANDOWSKI, Matthew (ETH Zürich and CERN); GELLER, Michael (Tel Aviv University)

Contribution ID: 23

Type: **not specified**

Simulations and nonlinearities beyond Λ CDM

Wednesday 6 November 2024 09:45 (45 minutes)

Presenter: KOYAMA, Kazuya (University of Portsmouth)

Contribution ID: 24

Type: **not specified**

Galaxy bias and application to H-alpha emitters

Wednesday 6 November 2024 11:00 (45 minutes)

Presenter: DESJACQUES, Vincent (Technion)

Contribution ID: 25

Type: **not specified**

A plot twist in the growth of perturbations: matter clustering suppression induced by Standard Model processes

Wednesday 6 November 2024 11:45 (10 minutes)

Presenter: CAMARENA, David (University of New Mexico)

Session Classification: Short Talks 4

Contribution ID: 26

Type: **not specified**

Bootstrapping Lagrangian perturbation theory for LSS

Wednesday 6 November 2024 11:55 (10 minutes)

Presenter: PARDEDE, Kevin (INFN Parma)

Session Classification: Short Talks 4

Contribution ID: 27

Type: **not specified**

Power spectrum and bispectrum analysis of eBOSS DR16 quasar sample to constrain primordial non-Gaussianity

Wednesday 6 November 2024 12:05 (10 minutes)

Presenter: BARBERI SQUAROTTI, Matilde (University of Milan)

Session Classification: Short Talks 4

Contribution ID: 28

Type: **not specified**

The renormalization group for Large-Scale Structure

Wednesday 6 November 2024 12:15 (10 minutes)

Presenter: RUBIRA, Henrique (LMU / Cambridge)

Session Classification: Short Talks 4

Contribution ID: 29

Type: **not specified**

DESI: First Year results and analysis priorities for the Third Year data sample

Wednesday 6 November 2024 14:30 (30 minutes)

Presenter: DAWSON, Kyle (University of Utah)

Contribution ID: **30**

Type: **not specified**

Modeling galaxy clustering in the Euclid mission

Wednesday 6 November 2024 15:00 (30 minutes)

Presenter: CROCCE, Martin (ICE-CSIC Barcelona)

Contribution ID: 31

Type: **not specified**

Discussion session 2: BSM signals in LSS (Observations)

Wednesday 6 November 2024 16:00 (1 hour)

Presenters: DAWSON, Kyle (University of Utah); GUZZO, Luigi (University of Milan); SIMONOVIC, Marko (University of Florence); CROCCE, Martin (ICE-CSIC Barcelona)

Contribution ID: 32

Type: **not specified**

Don't miss the forest for the trees: the Lyman-alpha forest in effective field theory

Thursday 7 November 2024 09:45 (45 minutes)

Presenter: IVANOV, Mikhail (MIT)

Contribution ID: 33

Type: **not specified**

Primordial imprints in galaxy power spectra

Thursday 7 November 2024 11:00 (45 minutes)

Presenter: WALLISCH, Benjamin (Stockholm U, Nordita and UT Austin)

Contribution ID: 34

Type: **not specified**

Quintessence, Naturally

Thursday 7 November 2024 11:45 (45 minutes)

Presenter: KALOPEL, Nemanja (UC Davis)

Contribution ID: 35

Type: **not specified**

Interacting dark sectors in LSS

Friday 8 November 2024 09:45 (45 minutes)

Presenter: JOSEPH, Melissa (University of Utah)

Contribution ID: 36

Type: **not specified**

Neutrino masses from Large-Scale Structures: future sensitivity and theory dependence

Friday 8 November 2024 11:00 (45 minutes)

Presenter: RACCO, Davide (ETH and U of Zürich)

Contribution ID: 37

Type: **not specified**

Closing

Friday 8 November 2024 11:45 (45 minutes)

Contribution ID: **38**

Type: **not specified**

Long-range massive dark matter self-interactions in cosmology

Monday 4 November 2024 17:00 (10 minutes)

Presenter: COSTA, Marco (Perimeter Institute)

Session Classification: Short Talks 1

Contribution ID: 39

Type: **not specified**

Characterizing late time phase transitions with cosmology

Monday 4 November 2024 17:10 (10 minutes)

Presenter: BOTTARO, Salvatore (Tel Aviv University)

Session Classification: Short Talks 1

Contribution ID: **40**

Type: **not specified**

Workshop intro

Monday 4 November 2024 10:55 (5 minutes)

Contribution ID: 41

Type: **not specified**

Bayesian field-level inference of local primordial non-Gaussianity in next-generation galaxy surveys

Tuesday 5 November 2024 12:15 (10 minutes)

Presenter: ANDREWS, Adam (INAF OAS Bologna)

Session Classification: Short Talks 2