

# **New Strategies For Extracting Cosmology From Future Galaxy Surveys**



## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

# Extracting Cosmology from Galaxy Surveys in the Systematics-Dominated Regime

*Monday, July 3, 2023 10:00 AM (1 hour)*

**Presenter:** KRAUSE, Elisabeth

Contribution ID: 2

Type: **not specified**

**Talk**

Contribution ID: 3

Type: **not specified**

# **The Effective Field Theory of Large-Scale Structure and Multi-tracer**

*Monday, July 3, 2023 11:30 AM (30 minutes)*

**Presenter:** RUBIRA, Henrique

Contribution ID: 4

Type: **not specified**

# **Gravitation And the Universe from Large Scale-Structures: The GAUSS mission concept**

*Monday, July 3, 2023 12:00 PM (30 minutes)*

**Presenter:** BLANCHARD, Alain

Contribution ID: 5

Type: **not specified**

## **Cleaning the Euclid (slitless) spectroscopic sample: how far can we anticipate and mitigate systematics?**

*Monday, July 3, 2023 2:00 PM (1 hour)*

**Presenter:** MONACO, Pierluigi

Contribution ID: 6

Type: **not specified**

## Discussion on Survey Design and Systematics

*Monday, July 3, 2023 3:30 PM (1 hour)*

**Presenters:** KRAUSE, Elisabeth; MONACO, Pierluigi

Contribution ID: 7

Type: **not specified**

## **Capturing non-Gaussian Information of the LSS: Novel Statistics & Novel Analysis Techniques**

*Wednesday, July 5, 2023 3:00 PM (1 hour)*

**Presenter:** MORADINEZHAD, Azadeh



Contribution ID: 8

Type: **not specified**

# Using marked correlation functions to trace the environmental correlations of galaxy properties

*Wednesday, July 5, 2023 4:00 PM (30 minutes)*

**Presenter:** SURESHKUMAR, Unnikrishnan Potty

Contribution ID: 9

Type: **not specified**

## **Improving cosmological constraints using comic web environments**

*Wednesday, July 5, 2023 5:00 PM (30 minutes)*

**Presenter:** BONNAIRE, Tony

Contribution ID: **10**

Type: **not specified**

## **Projected galaxy clustering and weak lensing one-point statistics**

*Wednesday, July 5, 2023 5:30 PM (30 minutes)*

**Presenter:** CASTIBLANCO, Lina

Contribution ID: **11**

Type: **not specified**

**TBA**

*Thursday, July 6, 2023 9:00 AM (1 hour)*

**Presenter:** ABEL, Tom

Contribution ID: 12

Type: **not specified**

# Constraining and Estimating Cosmological Parameters from Persistent Homology

*Thursday, July 6, 2023 11:00 AM (30 minutes)*

**Presenter:** YIP, Jacky

Contribution ID: 13

Type: **not specified**

# Constraining cosmology with density-split clustering

*Thursday, July 6, 2023 10:00 AM (30 minutes)*

**Presenter:** PAILLAS, Enrique

Contribution ID: 14

Type: **not specified**

## Constraining cosmology with halo PDFs

*Wednesday, July 5, 2023 6:00 PM (30 minutes)*

**Presenter:** GOULD, Beth

Contribution ID: 15

Type: **not specified**

## Discussion on Beyond 2-point Summaries

*Thursday, July 6, 2023 11:30 AM (1 hour)*

**Presenters:** MORADINEZHAD, Azadeh; ABEL, Tom



Contribution ID: 16

Type: **not specified**

## Explicit Likelihood Approaches to Large Scale Structure

*Tuesday, July 4, 2023 2:00 PM (1 hour)*

**Presenter:** SELJAK, Uros

Contribution ID: 17

Type: **not specified**

## Discussion on Field-level Inference

*Tuesday, July 4, 2023 4:30 PM (1 hour)*

**Presenters:** PORQUERES, Natalia; SELJAK, Uros

Contribution ID: **18**

Type: **not specified**

## Public Talk?

Contribution ID: **19**

Type: **not specified**

## Field-level approach for cosmic shear

*Tuesday, July 4, 2023 10:00 AM (1 hour)*

**Presenter:** PORQUERES, Natalia

Contribution ID: 20

Type: **not specified**

# Field-level cosmology from biased tracers in redshift space

*Tuesday, July 4, 2023 12:00 PM (30 minutes)*

**Presenter:** STADLER, Julia

Contribution ID: **21**

Type: **not specified**

**Talk**

Contribution ID: 22

Type: **not specified**

## Discussion

**Presenters:** PORQUERES, Natalia; SELJAK, Uros

Contribution ID: 23

Type: **not specified**

# Uncovering Inflation with Galaxy N-pt functions

*Thursday, July 6, 2023 2:00 PM (1 hour)*

**Presenter:** PHILCOX, Oliver



Contribution ID: 24

Type: **not specified**

## Short Talk

Contribution ID: 25

Type: **not specified**

## **Towards optimal and robust constraints of cosmic inflation using galaxy data**

*Thursday, July 6, 2023 4:00 PM (30 minutes)*

**Presenter:** BARREIRA, Alex

Contribution ID: 26

Type: **not specified**

# Primordial Non-Gaussianity and Relativistic Effects

*Thursday, July 6, 2023 4:30 PM (30 minutes)*

**Presenter:** DI DIO, Enea

Contribution ID: 27

Type: **not specified**

## **Bias Methods for Primordial Non-Gaussianity with Spectroscopic Surveys**

*Thursday, July 6, 2023 5:00 PM (30 minutes)*

**Presenter:** SULLIVAN, James

Contribution ID: 28

Type: **not specified**

## **Extracting information on primordial non-Gaussianity at non-linear scales**

*Friday, July 7, 2023 9:00 AM (30 minutes)*

**Presenter:** LIGUORI, Michele

Contribution ID: 29

Type: **not specified**

# **Constraining cosmology with non-linear wavelet transforms**

*Friday, July 7, 2023 9:30 AM (30 minutes)*

**Presenter:** PERON, Matteo

Contribution ID: 30

Type: **not specified**

## **Novel signatures of primordial non-Gaussianity in large scale structure simulation**

*Friday, July 7, 2023 10:00 AM (30 minutes)*

**Presenter:** COULTON, Will

Contribution ID: 31

Type: **not specified**

## **Lattice simulations of inflation as a new way to predict the primordial density field**

*Friday, July 7, 2023 11:00 AM (30 minutes)*

**Presenter:** CARAVANO, Angelo



Contribution ID: 32

Type: **not specified**

## Welcome by the Organizers

*Monday, July 3, 2023 9:45 AM (15 minutes)*

**Presenters:** ABEL, Tom; BIAGETTI, Matteo (SISSA); SCHMIDT, Fabian; STADLER, Julia; UHLE-MANN, Cora

Contribution ID: 33

Type: **not specified**

## Field level model for HI and applications

*Tuesday, July 4, 2023 11:30 AM (30 minutes)*

**Presenter:** OBULJEN, Andrej

Contribution ID: 34

Type: **not specified**

## Sampling for Field-Level Inference

*Tuesday, July 4, 2023 3:00 PM (30 minutes)*

**Presenter:** BAYER, Adrian

Contribution ID: 35

Type: **not specified**

## **Fast realistic, differentiable, mock halo generation for wide-field galaxy surveys**

*Tuesday, July 4, 2023 4:00 PM (30 minutes)*

**Presenter:** DING, Simon

Contribution ID: 36

Type: **not specified**

## **Model-independent searches for New Physics from nonlinear scales**

*Thursday, July 6, 2023 3:00 PM (30 minutes)*

**Presenter:** PIETRONI, Massimo

Contribution ID: 37

Type: **not specified**

## **Discussion on Primordial non-Gaussianity and primordial physics**

*Friday, July 7, 2023 11:30 AM (1 hour)*

**Presenter:** PHILCOX, Oliver

Contribution ID: **38**

Type: **not specified**

## Closing Remarks

**Presenters:** ABEL, Tom; BIAGETTI, Matteo; SCHMIDT, Fabian; STADLER, Julia; UHLEMANN, Cora

Contribution ID: 39

Type: **not specified**

## Free Discussion

*Friday, July 7, 2023 2:00 PM (3 hours)*