

CASTLE 2024

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome & opening remarks

Wednesday, 18 September 2024 09:30 (15 minutes)

Presenter: Prof. CAMERA, Stefano (Università degli Studi di Torino & INFN Torino)

Contribution ID: 2

Type: **not specified**

State of the art of optical/near-infrared cosmological surveys

Wednesday, 18 September 2024 09:45 (45 minutes)

Review talk(s)

Presenter: Dr BIANCHI, Davide

Contribution ID: 4

Type: **not specified**

Cross-Correlation between CIB and Galaxy Clustering

Thursday, 19 September 2024 10:15 (25 minutes)

Presenter: HAN, Jiakang (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 5

Type: **not specified**

Future measurements of S8 parameter with tomographic cross-correlations between LSST and CMB experiments

*Wednesday, 18 September 2024 11:25 (25 minutes)***Presenter:** SARAF, Chandra Shekhar (Korea Astronomy and Space Science Institute)

Contribution ID: 6

Type: **not specified**

State of the art of radio cosmological surveys

Wednesday, 18 September 2024 13:45 (45 minutes)

Review talk(s)

Presenter: SPINELLI, Marta

Contribution ID: 7

Type: **not specified**

Unveiling the HI auto-power spectrum with MeerKAT

Wednesday, 18 September 2024 14:55 (25 minutes)

Presenter: BARBERI SQUAROTTI, Matilde (Università degli Studi di Milano)

Contribution ID: 9

Type: **not specified**

State of the art of CMB surveys and complementary observables

Thursday, 19 September 2024 09:30 (45 minutes)

Review talk

Presenter: HU, Bin (Beijing Normal University)

Contribution ID: 10

Type: **not specified**

Neutral Hydrogen stacking from MeerKLASS: challenges, results and prospects for SKA-Mid

Wednesday, 18 September 2024 15:50 (25 minutes)

Presenter: CHEN, Zhaoting (University of Edinburgh)

Contribution ID: 11

Type: **not specified**

Cross-correlating the Evolutionary Map of the Universe (EMU) Pilot Survey with CMB Lensing: Constraints on Cosmology and Galaxy Bias

*Wednesday, 18 September 2024 16:15 (25 minutes)***Presenter:** TANIDIS, Konstantinos

Contribution ID: **12**Type: **not specified**

Fire talks

Wednesday, 18 September 2024 17:05 (1 hour)

Presenters: SCARAMELLA, Roberto (INAF - Osservatorio di Roma); MONACO, Pierluigi (Istituto Nazionale di Fisica Nucleare); DE CARO, Bianca

Contribution ID: 13

Type: **not specified**

Detecting Relativistic Doppler via Multi-tracing a Single Galaxy Population

Wednesday, 18 September 2024 11:50 (25 minutes)

Presenter: MONTANO, Federico (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 14

Type: **not specified**

Cosmology with HI Intensity Mapping on Small Scales

Wednesday, 18 September 2024 14:30 (25 minutes)

Presenter: MAZUMDER, Aishrila (Jodrell Bank Centre for Astrophysics, University of Manchester)

Contribution ID: 15

Type: **not specified**

Squeezing information from radio surveys to probe the primordial Universe

Wednesday, 18 September 2024 16:40 (25 minutes)

Presenter: KARAGIANNIS, Dionisys

Contribution ID: 16

Type: **not specified**

Constraining the Growth History and Quasar Bias Evolution at High- z with Quaia

*Thursday, 19 September 2024 11:10 (25 minutes)***Presenter:** PICCIRILLI, Giulia (Università di Roma Tor Vergata)

Contribution ID: 17

Type: **not specified**

Model-independent test of General Relativity through the combination of the Weyl potential and Galaxy Velocities

*Thursday, 19 September 2024 11:35 (25 minutes)***Presenter:** GRIMM, Nastassia (University of Geneva)

Contribution ID: **18**

Type: **not specified**

Model-Independent Measurement of the Matter-Radiation Equality Scale from DESI and Tactics for Upcoming Surveys

Wednesday, 18 September 2024 10:30 (25 minutes)

Presenter: BAHR-KALUS, Benedict

Contribution ID: 19

Type: **not specified**

Testing gravity through the distortion of time

Thursday, 19 September 2024 12:00 (25 minutes)

Presenter: CASTELLO, Sveva (University of Geneva)

Contribution ID: 20

Type: **not specified**

Running primordial perturbations: prospects from future large-scale surveys

Thursday, 19 September 2024 13:55 (25 minutes)

Presenter: PARKINSON, David (Korea Astronomy and Space Science Institute)

Contribution ID: 21

Type: **not specified**

Self-calibration of observational systematic effects

*Thursday, 19 September 2024 14:20 (25 minutes)***Presenter:** INGRAO, Roberto (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 22

Type: **not specified**

On cosmological clustering of Graviational Wave events

Thursday, 19 September 2024 14:45 (25 minutes)

Presenter: FONSECA, José (Institute of Astrophysics and Space Sciences, U. Porto)

Contribution ID: 23

Type: **not specified**

Assembly bias in the local PNG halo bias and its implication for fNL constraints

*Thursday, 19 September 2024 15:10 (25 minutes)***Presenter:** LAZEYRAS, Titouan (University of Milano Bicocca)

Contribution ID: 24

Type: **not specified**

Importance of Relativistic Contributions to the Galaxy Bispectrum

*Thursday, 19 September 2024 16:05 (25 minutes)***Presenter:** ROSSITER, Samantha (Universita degli studi di Torino)

Contribution ID: 25

Type: **not specified**

Machine learning for cosmology: from consistency tests to simulation based inference

*Friday, 20 September 2024 10:00 (25 minutes)***Presenter:** MARTINELLI, Matteo (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 53

Type: **not specified**

Forecasting the sensitivity of pulsar timing arrays to scalar induced gravitational waves

Thursday, 19 September 2024 16:30 (25 minutes)

Presenter: CECCHINI, Chiara (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 54

Type: **not specified**

Damping wings in the Lyman-alpha forest: a model-independent measurement of the neutral fraction at $5.4 < z < 6.1$

*Thursday, 19 September 2024 16:55 (25 minutes)***Presenter:** SPINA, Benedetta (Heidelberg University)

Contribution ID: 55

Type: **not specified**

The infall region as a complementary probe to cluster counts

Thursday, 19 September 2024 17:20 (25 minutes)

Presenter: MPETHA, Charlie (University of Edinburgh)

Contribution ID: 56

Type: **not specified**

Machine Learning Identification of Strongly Lensed Gravitational Waves Events

Friday, 20 September 2024 10:25 (25 minutes)

Presenter: CAMPAILLA, Giulia (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 57

Type: **not specified**

A Trifecta of Modelling Tools: Navigating COMPAS, Shark and Bayesian Inference for Binary Black Hole Model Selection

Friday, 20 September 2024 10:50 (25 minutes)

Presenter: RAUF, Liana (Australian National University)

Contribution ID: 58

Type: **not specified**

Wrap-up discussion

Friday, 20 September 2024 11:15 (1h 5m)

Presenter: PANEL TBD