

# **SKA Cosmology SWG Meeting 2024**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

# Welcome

*Monday 4 November 2024 09:25 (10 minutes)*

Contribution ID: 2

Type: **not specified**

## Overview of External EoI Chapters

*Monday 4 November 2024 09:35 (20 minutes)*

Contribution ID: 3

Type: **not specified**

## Intelligence from other SWGs

*Monday 4 November 2024 09:55 (20 minutes)*

A short discussion session on what can be taken from your experiences in the Science Book process with other SWGs.

If you are a member of another SWG and have been involved in their Chapter coordination, please be ready to speak up!

Contribution ID: 4

Type: **not specified**

## **Commensal HI-continuum cosmology surveys**

*Monday 4 November 2024 10:15 (15 minutes)*

**Presenter:** PARKINSON, David

Contribution ID: 5

Type: **not specified**

## **The largest cosmic scales: Matter dipole, ISW and non-Gaussianity**

*Monday 4 November 2024 10:30 (15 minutes)*

**Presenter:** SCHWARZ, Dominik

Contribution ID: 6

Type: **not specified**

## **Constraining the frequency spectrum of cosmic radio background signals with dipole analyses on sky areas observed by SKA**

*Monday 4 November 2024 11:00 (15 minutes)*

**Presenter:** TROMBETTI, Tiziana

Contribution ID: 7

Type: **not specified**

# **Kinematic and intrinsic dipole of cosmic radio background from sky areas observed by SKA and comparison with other dipole estimations**

*Monday 4 November 2024 11:15 (15 minutes)*

**Presenter:** BURIGANA, Carlo



Contribution ID: 8

Type: **not specified**

## **Continuum cosmology studies from LOFAR: Results and lessons learned for the SKAO**

*Monday 4 November 2024 11:30 (15 minutes)*

**Presenter:** HALE, Catherine

Contribution ID: 9

Type: **not specified**

## Testing the Cosmological Principle with the SKA

*Monday 4 November 2024 14:00 (15 minutes)*

**Presenter:** VON HAUSEGGER, Sebastian

Contribution ID: **10**

Type: **not specified**

## **Stress Testing the Copernican Principle with the SKA**

*Monday 4 November 2024 14:15 (15 minutes)*

**Presenter:** LEWIS, Geraint F.

Contribution ID: 11

Type: **not specified**

## Weak Lensing High Order Statistics

*Monday 4 November 2024 14:45 (15 minutes)*

**Presenter:** STARCK, JL

Contribution ID: 12

Type: **not specified**

## Weak Lensing with the SKAO

*Monday 4 November 2024 14:30 (15 minutes)*

**Presenter:** HARRISON, Ian

Contribution ID: 13

Type: **not specified**

## **Separating point source contaminants at the visibility level**

*Monday 4 November 2024 12:00 (15 minutes)*

**Presenter:** KRISHNA, Shreyam Parth

Contribution ID: 14

Type: **not specified**

## **Gravitational lensing through clusters of galaxies**

*Monday 4 November 2024 11:45 (15 minutes)*

**Presenter:** POMMIER, Mamta

Contribution ID: 15

Type: **not specified**

## **2014 chapter review**

*Tuesday 5 November 2024 12:00 (20 minutes)*

**Presenter:** CAMERA, Stefano



Contribution ID: **16**

Type: **not specified**

## **SKA-Low chromaticity and IM/EOR PS detectability**

*Tuesday 5 November 2024 09:00 (15 minutes)*

**Presenter:** STAVELEY-SMITH, Lister

Contribution ID: 17

Type: **not specified**

# **Instrumental Systematics in Foreground Subtraction from Deep Cosmological HI Observations**

*Tuesday 5 November 2024 09:15 (15 minutes)*

**Presenter:** DATTA, Abhirup

Contribution ID: **18**

Type: **not specified**

## **Towards 21-cm intensity mapping using the SKA pathfinder uGMRT**

*Tuesday 5 November 2024 09:30 (15 minutes)*

**Presenter:** ELAHI, Khandakar Md Asif

Contribution ID: 19

Type: **not specified**

## **Cosmology with single-dish intensity mapping**

*Tuesday 5 November 2024 09:45 (15 minutes)*

**Presenter:** CARUCCI, Isabella Paola

Contribution ID: 20

Type: **not specified**

## **EoI(s) from NAOC and NEU**

*Tuesday 5 November 2024 10:15 (15 minutes)*

**Presenter:** LI, Yichao

Contribution ID: 21

Type: **not specified**

# **Cosmology on Small Scales with HI Intensity Mapping**

*Tuesday 5 November 2024 11:15 (15 minutes)*

**Presenter:** MAZUMDER, Aishrila

Contribution ID: 22

Type: **not specified**

## **Fast IM simulations and halo model**

*Tuesday 5 November 2024 14:30 (15 minutes)*

**Presenter:** HITZ, Pascal

Contribution ID: 23

Type: **not specified**

## **Dark Galaxies as Cosmological Probes at the Smallest Scales**

*Tuesday 5 November 2024 11:30 (15 minutes)*

**Presenter:** BENITEZ-LLAMBAY, Alejandro



Contribution ID: 24

Type: **not specified**

## Dark Matter with the SKAO

*Tuesday 5 November 2024 11:45 (15 minutes)*

**Presenter:** REGIS, Marco

Contribution ID: 25

Type: **not specified**

## Single dish stacking measurements

*Tuesday 5 November 2024 11:00 (15 minutes)*

**Presenter:** CHEN, Zhaoting

Contribution ID: 26

Type: **not specified**

## **21cm line profile simulation and TF**

*Tuesday 5 November 2024 14:45 (15 minutes)*

**Presenter:** MAYOR, Joel

Contribution ID: 27

Type: **not specified**

## **Quick galaxies and HI intensity mapping simulations for current and forthcoming surveys**

*Tuesday 5 November 2024 14:15 (15 minutes)*

**Presenter:** SINIGAGLIA, Francesco

Contribution ID: 28

Type: **not specified**

## **Cosmological impact of SKA redshift drift measurements**

*Tuesday 5 November 2024 15:00 (15 minutes)*

**Presenter:** MARTINS, Carlos

Contribution ID: **30**

Type: **not specified**

## **Synergies with other cosmological surveys**

*Wednesday 6 November 2024 09:15 (15 minutes)*

**Presenter:** FONSECA, Jose

Contribution ID: 31

Type: **not specified**

## **Measuring parametrized modified gravity models with the cross-correlation of Euclid and SKA**

*Wednesday 6 November 2024 09:30 (15 minutes)*

**Presenter:** CASAS, Santiago

Contribution ID: 32

Type: **not specified**

## **Squeezing information from radio surveys to probe the primordial Universe**

*Wednesday 6 November 2024 09:45 (15 minutes)*

**Presenter:** KARAGIANNIS, Dionysis



Contribution ID: 33

Type: **not specified**

## **Atomic gas in galaxies as a cosmological probe**

*Wednesday 6 November 2024 12:00 (15 minutes)*

**Presenter:** SPEKKENS, Kristine

Contribution ID: 34

Type: **not specified**

## **Prospects of a statistical detection of the 21-cm forest and its potential to constrain the cosmic heating and reionization history**

*Wednesday 6 November 2024 09:00 (15 minutes)*

**Presenter:** ŠOLTINSKÝ, Tomáš

Contribution ID: 35

Type: **not specified**

## **Baryonic Feedback with Fast Radio Bursts and SKA**

*Wednesday 6 November 2024 11:15 (15 minutes)*

**Presenter:** REISCHKE, Robert

Contribution ID: 37

Type: **not specified**

## **Observer's fingerprint in SKAO survey**

*Wednesday 6 November 2024 11:30 (15 minutes)*

**Presenter:** ELKHASHAB, M.Yousry

Contribution ID: **38**

Type: **not specified**

## **AA\* and enhancements discussion'**

*Wednesday 6 November 2024 12:15 (45 minutes)*

Contribution ID: 39

Type: **not specified**

## Chapter Planning Discussion

*Wednesday 6 November 2024 14:00 (1 hour)*

Contribution ID: 40

Type: **not specified**

## Chapter Planning Discussion

*Wednesday 6 November 2024 16:00 (1 hour)*

Contribution ID: 41

Type: **not specified**

## **Chapter Planning Discussion (breakout)**

*Wednesday 6 November 2024 15:00 (30 minutes)*



Contribution ID: 42

Type: **not specified**

## **Single dish intensity mapping progress with MeerKLASS**

*Tuesday 5 November 2024 10:00 (15 minutes)*

**Presenter:** CUNNINGTON, Steve

Contribution ID: 43

Type: **not specified**

## **Mocking radio skies with realistic clustering**

*Tuesday 5 November 2024 14:00 (15 minutes)*

**Presenter:** RONCONI, Tommaso

Contribution ID: 44

Type: **not specified**

## SKA Update

*Monday 4 November 2024 15:00 (30 minutes)*

**Presenter:** BONALDI, Anna (SKAO)

Contribution ID: 45

Type: **not specified**

## **Gravitational redshift from the SKA Phase 2 as a test of fundamental physics**

*Wednesday 6 November 2024 11:45 (15 minutes)*

**Presenter:** CASTELLO, Sveva