

News from the Dark 8



Rapport sur les contributions

ID de Contribution: **1**

Type: **Non spécifié**

Welcome

lundi 11 septembre 2023 14:00 (10 minutes)

ID de Contribution: 2

Type: **Non spécifié**

Matter-antimatter asymmetry and dark matter stability from baryon number conservation

lundi 11 septembre 2023 14:10 (30 minutes)

Orateur: IBARRA, Alejandro (TUM)

Classification de Session: Dark Matter Models

ID de Contribution: 3

Type: **Non spécifié**

Primordial black holes as dark matter candidates

lundi 11 septembre 2023 14:40 (30 minutes)

Orateur: KUHNEL, Florian (MPP and LMU)

Classification de Session: Dark Matter Models

ID de Contribution: 4

Type: **Non spécifié**

Recent Developments in Relativistic Embeddings of MOND

lundi 11 septembre 2023 15:10 (30 minutes)

Orateur: DURAKOVIC, Amel (ObAS & CEICO, FZU)

Classification de Session: Dark Matter Models

ID de Contribution: 5

Type: **Non spécifié**

The rapid production mechanism of dark matter

lundi 11 septembre 2023 16:10 (30 minutes)

Orateur: BHATIA, Disha (Institute of Physics, University of Sao Paulo)

Classification de Session: Dark Matter Models

ID de Contribution: 6

Type: **Non spécifié**

A Theory of Condensed Dark Matter

lundi 11 septembre 2023 16:40 (30 minutes)

Orateur: VANDECASTEELE, Jérôme (TUM)

Classification de Session: Dark Matter Models

ID de Contribution: 7

Type: **Non spécifié**

Why we need to care about unobservable modes

mardi 12 septembre 2023 09:30 (30 minutes)

In the coming decades, large observational efforts will allow us to map the distribution of the large scale structure of the Universe, the cosmic web. The main purpose of these galaxy surveys is to extract the information present in the observed density fluctuations, to deepen our understanding of gravity and the dark sector. However, from observations of the Cosmic Microwave Background, we know that there are also fluctuations on ultra-large scales, scales larger than these future surveys. In this talk, I will discuss the impact of these modes. They effectively renormalise the mean matter density and are essentially unobservables; however they increase cosmic variance by their coupling to observed modes. This increase of uncertainties is called super-sample covariance and has been the subject of intense research since the 2010s. While not giving a comprehensive review of the field, I will present some of my contributions to it and showcase the expected impact for the coming European survey Euclid.

Orateur: Dr LACASA, Fabien (UniGe)

Classification de Session: Structure formation & Cosmology

ID de Contribution: **8**

Type: **Non spécifié**

Cosmological probes of particle dark matter

mardi 12 septembre 2023 10:00 (30 minutes)

Orateur: HOOPER, Deanna (Helsinki University)

Classification de Session: Structure formation & Cosmology

ID de Contribution: 9

Type: **Non spécifié**

The invisible dilaton

mardi 12 septembre 2023 10:30 (30 minutes)

Orateur: BRAX, Philippe (IPHT)

Classification de Session: Structure formation & Cosmology

ID de Contribution: **10**

Type: **Non spécifié**

Axion dark mutterings

mardi 12 septembre 2023 11:30 (30 minutes)

Orateur: REDONDO, Javier (Theoretical Physics D., Zaragoza University. Max Planck Institute for Physics, Munich.)

Classification de Session: Structure formation & Cosmology

ID de Contribution: 11

Type: **Non spécifié**

Gravitational waves from binary black holes in a self-interacting scalar dark matter cloud

mercredi 13 septembre 2023 11:30 (30 minutes)

Orateur: VALAGEAS, Patrick (IPhT - CEA Saclay)

Classification de Session: Observations

ID de Contribution: 12

Type: **Non spécifié**

21cm signal sensitivity to dark matter decay

mardi 12 septembre 2023 12:00 (30 minutes)

Orateur: FACCHINETTI, Gaétan (ULB)

Classification de Session: Structure formation & Cosmology

ID de Contribution: 13

Type: **Non spécifié**

DM dynamics / evolution of structures on small scales

Orateur: PENARRUBIA, Jorge (Royal Observatory of Edinburgh)

Classification de Session: Galactic Dynamics

ID de Contribution: 14

Type: **Non spécifié**

Numerical simulations of galaxies: (biased) status

mardi 12 septembre 2023 14:00 (30 minutes)

Orateur: NEZRI, Emmanuel (LAM)

Classification de Session: Galactic Dynamics

ID de Contribution: 15

Type: **Non spécifié**

Galaxy formation and primordial non gaussianities

mardi 12 septembre 2023 14:30 (30 minutes)

Orateur: STAHL, Clément (ObAS)

Classification de Session: Galactic Dynamics

ID de Contribution: **16**

Type: **Non spécifié**

Constraints from disk heating

mardi 12 septembre 2023 15:00 (30 minutes)

Orateur: SCARCELLA, Francesca (LUPM)

Classification de Session: Galactic Dynamics

ID de Contribution: 17

Type: **Non spécifié**

Introducing the Velocity Dispersion Acceleration Relation and studying it in the case of the Milky Way

mardi 12 septembre 2023 16:00 (30 minutes)

Orateur: MONARI, Giacomo (ObAS)

Classification de Session: Galactic Dynamics

ID de Contribution: 18

Type: **Non spécifié**

The Large Magellanic Cloud as a dynamical dark matter laboratory

mardi 12 septembre 2023 16:30 (30 minutes)

Orateur: VASILIEV, Eugene (UK Astronomy Technology center Edinburgh)

Classification de Session: Galactic Dynamics

ID de Contribution: 19

Type: **Non spécifié**

The Challenges Brought by the JWST Observations of the Distant Universe.

mercredi 13 septembre 2023 10:00 (30 minutes)

Orateur: MAHLER, Guillaume (Durham University & U. Liège)

Classification de Session: Observations

ID de Contribution: **20**

Type: **Non spécifié**

Gravitational Wave observations with PTA

mercredi 13 septembre 2023 12:00 (30 minutes)

https://teams.microsoft.com/l/meetup-join/19%3ameeting_MzMyZTA3ZmEtZjc5Zi00YjBILTkyZTQtZjNhY2E4Nzk0NGRl75bd-4212-bb02-8ff9c0ea4ae9%22%2c%22Oid%22%3a%224e24f1ad-3573-4cd4-98f7-a696774e18ab%22%7d

Orateur: AUCLAIR, Pierre (CURL UCLouvain)

Classification de Session: Observations

ID de Contribution: 21

Type: **Non spécifié**

Constraints on dark matter cores from the tidal evolution of Milky Way satellites

mercredi 13 septembre 2023 10:30 (30 minutes)

Orateur: ERRANI, Raphaël (ObAS)

Classification de Session: Observations

ID de Contribution: 22

Type: **Non spécifié**

Dark matter from the center of SU(N)

lundi 11 septembre 2023 17:10 (30 minutes)

Orateur: GRIMBAUM-YAMAMOTO, Nicolas (ULB)

Classification de Session: Dark Matter Models