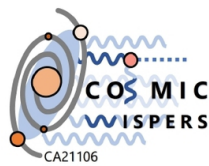


1st General Meeting of COST Action COSMIC WISPerS (CA21106)



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Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome

Session Classification: Management Committee

Contribution ID: 2

Type: **not specified**

Stellar Probes of Feebly Interacting Particles, Circa 2023

Tuesday, September 5, 2023 9:30 AM (40 minutes)

Presenter: VITAGLIANO, Edoardo

Session Classification: WG3 (Astrophysics)

Contribution ID: 3

Type: **not specified**

High-energy photons, magnetic fields and WISP searches

Wednesday, September 6, 2023 10:10 AM (40 minutes)

Presenter: KACHELRIESS, Michael (NTNU)

Session Classification: WG2 (Dark Matter and Cosmology)

Contribution ID: 4

Type: **not specified**

Axion Clouds around Pulsars

Tuesday, September 5, 2023 11:20 AM (40 minutes)

Presenter: WITTE, Samuel (University of Barcelona)

Session Classification: WG3 (Astrophysics)

Contribution ID: 5

Type: **not specified**

Dark Matter in the Milky Way: shortcoming & dynamical tests

Tuesday, September 5, 2023 12:00 PM (40 minutes)

Presenter: CASTANO, María Benito (Tartu Observatory)

Session Classification: WG3 (Astrophysics)

Contribution ID: 6

Type: **not specified**

Report on WG3 Activities

Tuesday, September 5, 2023 2:30 PM (30 minutes)

Presenter: CAPUTO, Andrea (CERN)

Session Classification: Round Table

Contribution ID: 7

Type: **not specified**

Discussion

Tuesday, September 5, 2023 3:00 PM (30 minutes)

Session Classification: Round Table

Contribution ID: 8

Type: **not specified**

QCD axion and density effects in stars

Tuesday, September 5, 2023 3:30 PM (20 minutes)

Presenter: STELZL, Stefan (EPFL(Lausanne))

Session Classification: WG3 (Astrophysics)

Contribution ID: 9

Type: **not specified**

Radio Signatures of axion-like particles

Tuesday, September 5, 2023 3:50 PM (20 minutes)

Presenter: SIGL, Guenter (Universität Hamburg)

Session Classification: WG3 (Astrophysics)

Contribution ID: **10**

Type: **not specified**

Large scale structure data and DM fifth force

Tuesday, September 5, 2023 4:30 PM (20 minutes)

Presenter: BOTTARO, Salvatore (Tel Aviv University)

Session Classification: WG3 (Astrophysics)

Contribution ID: 11

Type: **not specified**

Primordial Black Holes and micro-lensing

Tuesday, September 5, 2023 4:10 PM (20 minutes)

Presenter: Prof. HAFIZI, Mimoza (Tirana University)

Session Classification: WG3 (Astrophysics)

Contribution ID: 12

Type: **not specified**

String theory realisations of early dark energy

Tuesday, September 5, 2023 3:30 PM (20 minutes)

Presenter: MAHANTA, Ratul (Bologna University)

Session Classification: WG1 (Theory)

Contribution ID: 13

Type: **not specified**

Axionic Festina Lente

Tuesday, September 5, 2023 3:50 PM (20 minutes)

Presenter: VENKEN, Gerben (Heidelberg ITP)

Session Classification: WG1 (Theory)

Contribution ID: 14

Type: **not specified**

Testing BSM Physics with Gravitational Waves

Tuesday, September 5, 2023 4:10 PM (20 minutes)

Presenter: VILLA, Gonzalo (DAMTP - University of Cambridge)

Session Classification: WG1 (Theory)

Contribution ID: 15

Type: **not specified**

Low-scale leptogenesis with low-energy leptonic CP-violation

Tuesday, September 5, 2023 4:30 PM (20 minutes)

Presenter: Dr GRANELLI, Alessandro (Bologna University)

Session Classification: WG1 (Theory)

Contribution ID: 16

Type: **not specified**

Axion minivoids

Wednesday, September 6, 2023 9:30 AM (40 minutes)

Presenter: Dr O'HARE, Ciaran (University of Sydney)

Session Classification: WG2 (Dark Matter and Cosmology)

Contribution ID: 17

Type: **not specified**

Axion Star Explosions and the Reionization History of the Universe

Tuesday, September 5, 2023 10:10 AM (40 minutes)

Presenter: ESCUDERO, Miguel (CERN)

Session Classification: WG3 (Astrophysics)

Contribution ID: **18**

Type: **not specified**

Formation of ultralight dark matter solar halos

Wednesday, September 6, 2023 11:20 AM (40 minutes)

Presenter: GORGHETTO, Marco (Weizmann Institute)

Session Classification: WG2 (Dark Matter and Cosmology)

Contribution ID: 19

Type: **not specified**

Probing ultralight and degenerate dark matter with galactic dynamics

Wednesday, September 6, 2023 12:00 PM (40 minutes)

Presenter: Dr BLAS, Diego (Barcelona, Autonomia Univ.)

Session Classification: WG2 (Dark Matter and Cosmology)

Contribution ID: 20

Type: **not specified**

Cosmological defects

Wednesday, September 6, 2023 3:30 PM (20 minutes)

Presenter: Dr BLASI, Simone (Vrije University)

Session Classification: WG2 (Dark Matter and Cosmology)

Contribution ID: 21

Type: **not specified**

Cosmic strings

Wednesday, September 6, 2023 3:50 PM (20 minutes)

Presenter: Dr DREW, Amelia (Cambridge University)

Session Classification: WG2 (Dark Matter and Cosmology)

Contribution ID: 22

Type: **not specified**

Lattice simulations and axion properties: news from TWEXT

Wednesday, September 6, 2023 4:10 PM (20 minutes)

Presenter: LOMBARDO, Maria Paola (Istituto Nazionale di Fisica Nucleare)

Session Classification: WG2 (Dark Matter and Cosmology)

Contribution ID: 23

Type: **not specified**

Report on WG2 Activities

Wednesday, September 6, 2023 2:30 PM (30 minutes)

Presenter: VITAGLIANO, Edoardo

Session Classification: Round Table

Contribution ID: 24

Type: **not specified**

Discussion

Wednesday, September 6, 2023 3:00 PM (30 minutes)

Session Classification: Round Table

Contribution ID: 25

Type: **not specified**

Natural coordinates and consistency conditions for two-field models of inflation in fundamental theories of gravity and matter

Presenter: Prof. LAZAROIU, Calin (National Institute of Physics and Nuclear Engineering, Bucharest)

Session Classification: WG1 (Theory)

Contribution ID: 26

Type: **not specified**

Inflationary Schwinger dark matter production

Presenter: Dr BASTERO-GIL, Mar (Granada Univ.)

Session Classification: WG1 (Theory)

Contribution ID: 27

Type: **not specified**

Dark photon dark matter from inflation

Presenter: UBALDI, Lorenzo

Session Classification: WG1 (Theory)

Contribution ID: 28

Type: **not specified**

Observation of anomalies supporting the existence of the new particle X17

Wednesday, September 6, 2023 3:30 PM (20 minutes)

Presenter: Dr KRASZNAHORKAY, Attila (CERN)

Session Classification: WG4 (Direct searches)

Contribution ID: 29

Type: **not specified**

Search for ALPS at LHC

Wednesday, September 6, 2023 3:50 PM (20 minutes)

Presenter: GALLINARO, Michele

Session Classification: WG4 (Direct searches)

Contribution ID: **30**

Type: **not specified**

Search for topological defect dark matter with a global network of optical magnetometers (GNOME)

Wednesday, September 6, 2023 4:10 PM (20 minutes)

Presenter: GAVILÁN MARTÍN, Daniel (Johannes Gutenberg-University Mainz)

Session Classification: WG4 (Direct searches)

Contribution ID: 31

Type: **not specified**

Natural coordinates and consistency conditions for two-field models of inflation in fundamental theories of gravity and matter

Thursday, September 7, 2023 3:30 PM (20 minutes)

Presenter: LAZAROIU, Clain (UNED-Madrid and IFIN-HH Bucharest)

Session Classification: WG1 (Theory)

Contribution ID: 32

Type: **not specified**

Inflationary Schwinger dark matter production

Thursday, September 7, 2023 4:10 PM (20 minutes)

Presenter: BASTERO-GIL, Mar (Granada Univ.)

Session Classification: WG1 (Theory)

Contribution ID: 33

Type: **not specified**

Dark photon dark matter from inflation

Thursday, September 7, 2023 3:50 PM (20 minutes)

Presenter: UBALDI, Lorenzo

Session Classification: WG1 (Theory)

Contribution ID: 34

Type: **not specified**

Light bosons, superradiance and associated observables

Tuesday, September 5, 2023 5:20 PM (20 minutes)

Presenter: UNAL, Caner (Ben-Gurion)

Session Classification: WG3 (Astrophysics)

Contribution ID: 35

Type: **not specified**

Out of the dark: WISPs in String Theory and the Early Universe

Thursday, September 7, 2023 9:30 AM (40 minutes)

Presenter: Prof. CONLON, Joe (Oxford University)

Session Classification: WG1 (Theory)

Contribution ID: **36**

Type: **not specified**

Uncovering axion and BSM CP violations with EDMs

Thursday, September 7, 2023 10:10 AM (40 minutes)

Presenter: Prof. CHOI, Kiwoon (IBS)

Session Classification: WG1 (Theory)

Contribution ID: 37

Type: **not specified**

Prospects to scrutinise or smash SM*A*S*H

Thursday, September 7, 2023 11:20 AM (40 minutes)

Presenter: RINGWALD, Andreas (DESY)

Session Classification: WG1 (Theory)

Contribution ID: **38**

Type: **not specified**

Flavour in ALP effective field theories

Thursday, September 7, 2023 12:00 PM (40 minutes)

Presenter: RENNEN, Sophie (University of Glasgow)

Session Classification: WG1 (Theory)

Contribution ID: 39

Type: **not specified**

Report on WG1 Activities

Thursday, September 7, 2023 2:30 PM (30 minutes)

Presenter: CICOLI, Michele (Istituto Nazionale di Fisica Nucleare)

Session Classification: Round Table

Contribution ID: 40

Type: **not specified**

Discussion

Thursday, September 7, 2023 3:00 PM (30 minutes)

Session Classification: Round Table

Contribution ID: 42

Type: **not specified**

High energy resolution x-ray detectors for IAXO: advantages in pre- and post-discovery phases

Thursday, September 7, 2023 4:10 PM (20 minutes)

Presenter: GASTALDO, Loredana (Kirchhoff Institute for Physics, Heidelberg University)

Session Classification: WG4 (Direct searches)

Contribution ID: 43

Type: **not specified**

Probing the Dark Sector with NA64 and POKER at CERN SPS

Thursday, September 7, 2023 3:30 PM (20 minutes)

Presenter: MARSICANO, Luca (Istituto Nazionale di Fisica Nucleare)

Session Classification: WG4 (Direct searches)

Contribution ID: 44

Type: **not specified**

Axion searches at DESY

Friday, September 8, 2023 9:00 AM (40 minutes)

Presenter: Dr KOZLOWSKI, Todd (DESY)

Session Classification: WG4 (Direct searches)

Contribution ID: 45

Type: **not specified**

CAST and more than CAST; A Dark Sector Probe for 20+ Years

Friday, September 8, 2023 9:40 AM (40 minutes)

Presenter: Prof. CETIN, Serkant (Istinye University, Istanbul, Turkiye)

Session Classification: WG4 (Direct searches)

Contribution ID: 46

Type: **not specified**

Searching for new light particles with PADME and fixed target experiments

Friday, September 8, 2023 10:50 AM (40 minutes)

Presenter: KOZHUHAROV, Venelin (Istituto Nazionale di Fisica Nucleare)

Session Classification: WG4 (Direct searches)

Contribution ID: 47

Type: **not specified**

Status of the VMB@CERN experiment

Friday, September 8, 2023 11:30 AM (40 minutes)

Presenter: KUNC, Stepan (TUL Liberec)

Session Classification: WG4 (Direct searches)

Contribution ID: 48

Type: **not specified**

Report on WG4 activities

Friday, September 8, 2023 12:10 PM (30 minutes)

Presenter: KARUZA, Marin (Istituto Nazionale di Fisica Nucleare)

Session Classification: Round Table

Contribution ID: 49

Type: **not specified**

Discussion

Friday, September 8, 2023 12:40 PM (30 minutes)

Session Classification: Round Table

Contribution ID: 50

Type: **not specified**

Conclusions

Presenter: MIRIZZI, Alessandro (Istituto Nazionale di Fisica Nucleare)

Session Classification: Summary Session

Contribution ID: 51

Type: **not specified**

Conclusions

Friday, September 8, 2023 1:10 PM (20 minutes)

Presenter: MIRIZZI, Alessandro (Istituto Nazionale di Fisica Nucleare)

Session Classification: Conclusions

Contribution ID: 52

Type: **not specified**

Alla scoperta dell'universo invisibile: materia oscura, onde gravitazionali e buchi neri

Thursday, September 7, 2023 6:00 PM (1 hour)

Presenter: CAPUTO, Andrea

Session Classification: WG5 (Dissemination and Outreach)

Contribution ID: 53

Type: **not specified**

Birefringence in CMB anisotropies due to cosmological pseudoscalar fields

Tuesday, September 5, 2023 5:40 PM (20 minutes)

Presenter: GALAVERNI, Matteo (Vatican Observatory & INAF/OAS Bologna)

Session Classification: WG3 (Astrophysics)

Contribution ID: 54

Type: **not specified**

Photon to axion conversion during Big Bang Nucleosynthesis

Tuesday, September 5, 2023 6:00 PM (20 minutes)

Presenter: MASIP, Manuel (University of Granada)

Session Classification: WG3 (Astrophysics)

Contribution ID: 55

Type: **not specified**

Search for WISPs with gravitational-wave detectors

Thursday, September 7, 2023 3:50 PM (20 minutes)

Presenter: PIERINI, Lorenzo (INFN Roma)

Session Classification: WG4 (Direct searches)

Contribution ID: 56

Type: **not specified**

WG 1 report

Friday, September 8, 2023 2:50 PM (20 minutes)

Presenter: BRIVIO, Ilaria

Session Classification: Management Committee Meeting

Contribution ID: 57

Type: **not specified**

WG2 report

Friday, September 8, 2023 3:10 PM (20 minutes)

Presenter: VITAGLIANO, Edoardo

Session Classification: Management Committee Meeting

Contribution ID: 58

Type: **not specified**

WG3 report

Friday, September 8, 2023 3:30 PM (20 minutes)

Presenter: CAPUTO, Andrea

Session Classification: Management Committee Meeting

Contribution ID: 59

Type: **not specified**

WG 4 report

Friday, September 8, 2023 3:50 PM (20 minutes)

Presenter: KARUZA, Marin (Istituto Nazionale di Fisica Nucleare)

Session Classification: Management Committee Meeting

Contribution ID: **60**

Type: **not specified**

WG5 report

Friday, September 8, 2023 4:10 PM (20 minutes)

Presenter: GASTALDO, Loredana (Kirchhoff Institute for Physics, Heidelberg University)

Session Classification: Management Committee Meeting

Contribution ID: **61**

Type: **not specified**

ECI Committee Report

Friday, September 8, 2023 4:50 PM (15 minutes)

Presenter: CARENZA, Pierluca

Session Classification: Management Committee Meeting

Contribution ID: **62**

Type: **not specified**

CA21106 Introduction

Friday, September 8, 2023 2:30 PM (20 minutes)

Presenter: MIRIZZI, Alessandro (Istituto Nazionale di Fisica Nucleare)

Session Classification: Management Committee Meeting

Contribution ID: 63

Type: **not specified**

Grant Awarding Coordinator report

Friday, September 8, 2023 5:05 PM (15 minutes)

Presenter: KOZHUHAROV, Venelin (Istituto Nazionale di Fisica Nucleare)

Session Classification: Management Committee Meeting

Contribution ID: **64**

Type: **not specified**

Report from Gender and Diversity Advisor

Friday, September 8, 2023 5:20 PM (20 minutes)

Presenter: Prof. SUNAR CERCI, Deniz

Session Classification: Management Committee Meeting

Contribution ID: 65

Type: **not specified**

Draft of W&B Plan 2024

Friday, September 8, 2023 5:40 PM (1 hour)

Presenter: MIRIZZI, Alessandro (Istituto Nazionale di Fisica Nucleare)

Session Classification: Management Committee Meeting

Contribution ID: **66**

Type: **not specified**

Report on WG5 activities and discussion

Thursday, September 7, 2023 5:00 PM (45 minutes)

Presenter: GASTALDO, Loredana

Session Classification: WG5 (Dissemination and Outreach)