

Workshop on Multi-front Exotic phenomena in Particle and Astrophysics (MEPA 2024)

Report of Contributions

Contribution ID: 1

Type: **not specified**

Opening and Welcome Speech

Sunday, 25 August 2024 09:00 (20 minutes)

Contribution ID: 2

Type: **not specified**

基于抗磁悬浮的精密力测量技术及其应用

Sunday, 25 August 2024 09:55 (25 minutes)

Presenter: 黄, 璞 (Nanjing University)

Session Classification: Axion Session1

Contribution ID: 3

Type: **not specified**

Searching for exotic spin-dependent interactions by diamond quantum sensors

Sunday, 25 August 2024 09:30 (25 minutes)

Presenter: 荣, 星 (USTC)

Session Classification: Axion Session1

Contribution ID: 4

Type: **not specified**

Search for exotic spin-dependent interactions with spin sensors

Sunday, 25 August 2024 10:20 (25 minutes)

Presenter: 江, 敏 (USTC)

Session Classification: Axion Session1

Contribution ID: 5

Type: **not specified**

Axion Wind Detection with the Homogeneous Precession Domain of Super-fluid Helium Three

Sunday, 25 August 2024 11:15 (25 minutes)

Presenter: GAO, Yang (Southern University of Science and Technology)

Session Classification: Axion Session 2

Contribution ID: 6

Type: **not specified**

Dark Photon Dark Matter Radio Signal from the Milky Way Electron Density

Sunday, 25 August 2024 11:40 (25 minutes)

Presenter: ARIEL, Arza (南京师范大学)

Session Classification: Axion Session 2

Contribution ID: 7

Type: **not specified**

Illuminating Black Hole Shadow with Dark Matter Annihilation

Sunday, 25 August 2024 12:05 (25 minutes)

Presenter: LIU, Yuxin (International Centre for Theoretical Physics Asia-Pacific, UCAS)

Session Classification: Axion Session 2

Contribution ID: 8

Type: **not specified**

First Scan Search for Dark Photon Dark Matter with a Tunable Superconducting Radio-Frequency Cavity

Sunday, 25 August 2024 14:00 (25 minutes)

Presenter: 舒, 菁 (PKU)

Session Classification: Dark Photon Session1

Contribution ID: 9

Type: **not specified**

Recent Progress of Dark SHINE R&D

Sunday, 25 August 2024 14:25 (25 minutes)

Presenter: 陈, 婧 (SJTU/TDLI)

Session Classification: Dark Photon Session1

Contribution ID: 10

Type: **not specified**

Recent Higgs to Dark Photon Combination Results from ATLAS

Sunday, 25 August 2024 14:50 (25 minutes)

Presenter: KHANH, Vu Ngoc (Tsung-Dao Lee Institute, Shanghai Jiao Tong University)

Session Classification: Dark Photon Session1

Contribution ID: 11

Type: **not specified**

Dark photon constraints from the APEX cavity haloscope experiment

Sunday, 25 August 2024 15:45 (25 minutes)

Presenter: HOUSTON, Nick (北京工业大学)

Session Classification: Dark Photon Session 2

Contribution ID: 12

Type: **not specified**

Exploring dark sectors at the NA64 experiment

Sunday, 25 August 2024 16:10 (25 minutes)

Presenter: MONGILLO, Martina (ETH Zurich)

Session Classification: Dark Photon Session 2

Contribution ID: 13

Type: **not specified**

Cosmic magnetic monopole search experiment SCEP

Sunday, 25 August 2024 16:35 (25 minutes)

Presenter: 林, 箐 (USTC)

Session Classification: Exotic & Millicharge Session 1

Contribution ID: 14

Type: **not specified**

Latest results and prospect on searching for fractionally charged particles with the DAMPE experiment

Sunday, 25 August 2024 17:00 (25 minutes)

Presenter: 徐, 恩珩 (USTC)

Session Classification: Exotic & Millicharge Session 1

Contribution ID: 15

Type: **not specified**

Recent Results on Dark Photon Search at the LHC

Monday, 26 August 2024 09:00 (25 minutes)

Presenter: 徐, 来林 (USTC)

Session Classification: Dark Photon Session 3

Contribution ID: 16

Type: **not specified**

Overview and Updates of DarkQuest

Monday, 26 August 2024 09:25 (25 minutes)

Presenter: FENG, Yongbin (Texas Tech University)

Session Classification: Dark Photon Session 3

Contribution ID: 17

Type: **not specified**

Recent progress on dark photon searches

Monday, 26 August 2024 09:50 (25 minutes)

Presenter: 安, 海鹏 (Tsinghua)

Session Classification: Dark Photon Session 3

Contribution ID: 18

Type: **not specified**

Low-energy supernova constraints on millicharged particles

Monday, 26 August 2024 10:45 (25 minutes)

Presenter: 刘, 佐伟 (南京大学)

Session Classification: Exotic & Millicharge Session 2

Contribution ID: 19

Type: **not specified**

Family tree decomposition of cosmological correlators

Monday, 26 August 2024 11:10 (25 minutes)

Presenter: 鲜于, 中之 (Tsinghua)

Session Classification: Exotic & Millicharge Session 2

Contribution ID: 20

Type: **not specified**

Binary Supermassive Black Holes Orbiting a Dark-Matter Soliton

Monday, 26 August 2024 14:00 (25 minutes)

Presenter: 刘, 涛 (HKUST)

Session Classification: Gravitational Wave Session 1

Contribution ID: 21

Type: **not specified**

Wide binaries as a gravitational probe to dark solitons

Monday, 26 August 2024 14:25 (25 minutes)

Presenter: 高, 宇 (IHEP)

Session Classification: Gravitational Wave Session 1

Contribution ID: 22

Type: **not specified**

PKU-Muon Experiment for Muon Tomography and Exotic Physics Search

Monday, 26 August 2024 15:15 (25 minutes)

Presenter: 高, 乐耘 (北京大学)

Session Classification: Gravitational Wave Session 1

Contribution ID: 23

Type: **not specified**

Axion-meson interactions in chiral EFT

Monday, 26 August 2024 16:10 (25 minutes)

Presenter: 郭, 志辉 (Hebei Normal University)

Session Classification: Axion Session3

Contribution ID: 24

Type: **not specified**

Axion searches at the quantum level

Monday, 26 August 2024 16:35 (25 minutes)

Presenter: YANG, Qiaoli (Jinan University)

Session Classification: Axion Session3

Contribution ID: 25

Type: **not specified**

Detecting quadratically coupled ultralight dark matter with stimulated annihilation

Monday, 26 August 2024 17:00 (25 minutes)

Presenter: 祝, 斌 (烟台大学)

Session Classification: Axion Session3

Contribution ID: 26

Type: **not specified**

Time Projection Chamber technology and application in Axion detection

Presenter: QI, Huirong (IHEP)

Session Classification: Axion Session3

Contribution ID: 27

Type: **not specified**

Electromagnetic properties of sub-GeV dark states

Tuesday, 27 August 2024 09:00 (25 minutes)

Presenter: CHU, Xiaoyong (International Centre for Theoretical Physics Asia-Pacific, UCAS)

Session Classification: Other Exotics Session 1

Contribution ID: 28

Type: **not specified**

The Spectrum of Line Operator in G2HDM model

Tuesday, 27 August 2024 09:25 (25 minutes)

Presenter: 薛, 迅 (华东师范大学)

Session Classification: Other Exotics Session 1

Contribution ID: 29

Type: **not specified**

Taming the cosmological abundance of magnetic monopoles

Tuesday, 27 August 2024 09:50 (25 minutes)

Presenter: 张, 宸 (Northeastern University (China))

Session Classification: Other Exotics Session 1

Contribution ID: 31

Type: **not specified**

Gravitational wave signals of axion dark matter

Tuesday, 27 August 2024 10:45 (25 minutes)

Presenter: 黄, 发朋 (中山大学)

Session Classification: Gravitational Wave Session 2

Contribution ID: 32

Type: **not specified**

Intertwining Axion and gravitational waves, generations and detection.

Tuesday, 27 August 2024 11:10 (25 minutes)

Presenter: 孙, 斯纯 (北京理工大学)

Session Classification: Gravitational Wave Session 2

Contribution ID: 33

Type: **not specified**

Phase transition during inflation and the gravitational wave signal at pulsar timing arrays

Tuesday, 27 August 2024 11:35 (25 minutes)

Presenter: YANG, Chen (清华)

Session Classification: Gravitational Wave Session 2

Contribution ID: 34

Type: **not specified**

Dual Inflation and Bounce Cosmologies Interpretation of Pulsar Timing Array Data

Monday, 26 August 2024 14:50 (25 minutes)

Presenter: 李, 昌鸿 (云南大学)

Session Classification: Gravitational Wave Session 1

Contribution ID: 35

Type: **not specified**

Dressed vs. pairwise states, and the geometric phase of monopoles and charges

Monday, 26 August 2024 11:35 (25 minutes)

Presenter: 董, 子毓 (IFAE, Barcelona)

Session Classification: Exotic & Millicharge Session 2

Contribution ID: **36**

Type: **not specified**

Photo

Sunday, 25 August 2024 09:20 (10 minutes)