

Light Dark Matter 2025

Report of Contributions

Contribution ID: 1

Type: **not specified**

Status of LDM searches at colliders.

Tuesday, 8 April 2025 14:10 (35 minutes)

Primary author: ARIAS ARAGON, Fernando (Istituto Nazionale di Fisica Nucleare)

Presenter: ARIAS ARAGON, Fernando (Istituto Nazionale di Fisica Nucleare)

Session Classification: LDMA: the broad picture

Contribution ID: 2

Type: **not specified**

Implications of cosmological and astrophysical observations on LDM searches at accelerators

Tuesday, 8 April 2025 14:45 (35 minutes)

Presenter: CALORE, Francesca (University of Amsterdam)

Session Classification: LDMA: the broad picture

Contribution ID: 3

Type: **not specified**

Coffe break

Tuesday, 8 April 2025 16:00 (30 minutes)

Contribution ID: 4

Type: **not specified**

Progress and challenges for the direct-detection of sub-GeV dark matter

Tuesday, 8 April 2025 16:30 (25 minutes)

Presenter: Dr KAZNACHEEVA, Margarita

Session Classification: Light Dark Matter Direct Detection

Contribution ID: 5

Type: **not specified**

Recent results from liquid-Ar detectors

Tuesday, 8 April 2025 16:55 (25 minutes)

Presenter: Dr VAN UFFELEN, Marie

Session Classification: Light Dark Matter Direct Detection

Contribution ID: 6

Type: **not specified**

Recent results from liquid-Xe detectors

Session Classification: Light Dark Matter Direct Detection

Contribution ID: 7

Type: **not specified**

Direct DM searches with solid state detectors

Tuesday, 8 April 2025 17:20 (25 minutes)

Presenter: PRIVITERA, Paolo (INFN)

Session Classification: Light Dark Matter Direct Detection

Contribution ID: 8

Type: **not specified**

Discussion

Tuesday, 8 April 2025 17:45 (15 minutes)

Session Classification: Light Dark Matter Direct Detection

Contribution ID: 9

Type: **not specified**

Looking forward to dark matter at high-energy colliders

Wednesday, 9 April 2025 09:00 (35 minutes)

Primary author: TROJANOWSKI, Sebastian (National Centre for Nuclear Research (NCBJ), Poland)

Presenter: TROJANOWSKI, Sebastian (National Centre for Nuclear Research (NCBJ), Poland)

Session Classification: Light dark matter searches at accelerators

Contribution ID: **10**

Type: **not specified**

Effects of electron motion in positrons beam dump experiments

Wednesday, 9 April 2025 10:10 (25 minutes)

Presenter: GRILLI DI CORTONA, Giovanni (Istituto Nazionale di Fisica Nucleare)

Session Classification: Light dark matter searches at accelerators

Contribution ID: 11

Type: **not specified**

Muonphilic LDM

Session Classification: Light dark matter searches at accelerators

Contribution ID: 12

Type: **not specified**

Light Dark Matter with proton beams

Wednesday, 9 April 2025 09:35 (35 minutes)

Presenter: POSPELOV, Maxim (Perimeter Institute / University of Minnesota)

Session Classification: Light dark matter searches at accelerators

Contribution ID: 13

Type: **not specified**

Scattering meets absorption in dark matter detection

Wednesday, 9 April 2025 10:35 (25 minutes)

Primary author: PHAN, Anh Vu (NIKHEF, Amsterdam (NL))

Presenter: PHAN, Anh Vu (NIKHEF, Amsterdam (NL))

Session Classification: Light dark matter searches at accelerators

Contribution ID: 14

Type: **not specified**

Coffee break

Session Classification: Light dark matter search with electron-beam, fixed target experiments

Contribution ID: 15

Type: **not specified**

Light dark matter searches at LHCb

Friday, 11 April 2025 10:15 (25 minutes)

(speakers committee accepted, waiting for Andrii)

Presenter: Dr USACHOV, Andrii

Session Classification: Light dark matter searches at LHC

Contribution ID: 16

Type: **not specified**

Light dark matter searches at CMS

Friday, 11 April 2025 09:50 (25 minutes)

Presenter: DE ROECK, Albert (CERN)

Session Classification: Light dark matter searches at LHC

Contribution ID: 17

Type: **not specified**

Light dark matter searches at ATLAS

Friday, 11 April 2025 09:25 (25 minutes)

Presenter: SEBASTIANI, Cristiano (ROMA1)

Session Classification: Light dark matter searches at LHC

Contribution ID: **18**

Type: **not specified**

Discussion

Friday, 11 April 2025 10:40 (20 minutes)

Session Classification: Light dark matter searches at LHC

Contribution ID: 19

Type: **not specified**

Museum visit and lunch

Wednesday, 9 April 2025 13:00 (1h 30m)

Contribution ID: 20

Type: **not specified**

Light dark matter search at FASER

Session Classification: Light dark matter searches at LHC

Contribution ID: 21

Type: **not specified**

Light dark matter search at electron/positron colliders

Contribution ID: 22

Type: **not specified**

Welcome aperitif

Tuesday, 8 April 2025 18:00 (1h 30m)

Contribution ID: **23**

Type: **not specified**

Coffee break

Wednesday, 9 April 2025 16:00 (30 minutes)

Contribution ID: 24

Type: **not specified**

Ultra-light dark matter direct detection with anti-ferromagnetic materials

Wednesday, 9 April 2025 16:30 (25 minutes)

Presenter: ESPOSITO, Angelo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Light Dark Matter Direct Detection

Contribution ID: 25

Type: **not specified**

The migdal effect

Wednesday, 9 April 2025 16:55 (25 minutes)

Presenter: MCCABE, Christopher (King's College London)

Session Classification: Light Dark Matter Direct Detection

Contribution ID: 26

Type: **not specified**

LDM detection with SNSPDs super-conducting devices

Wednesday, 9 April 2025 17:20 (25 minutes)

Presenter: FIORILLO, Giuliana (Istituto Nazionale di Fisica Nucleare)

Session Classification: Light Dark Matter Direct Detection

Contribution ID: 27

Type: **not specified**

Ultra-low energy detectors:

Wednesday, 9 April 2025 17:45 (25 minutes)

Dan Mc kinsey deve confermare

Session Classification: Light Dark Matter Direct Detection

Contribution ID: 28

Type: **not specified**

The BDX experiment at JLab

Wednesday, 9 April 2025 11:30 (25 minutes)

Presenter: SPREAFICO, Marco (Istituto Nazionale di Fisica Nucleare)

Session Classification: Light dark matter search with electron-beam, fixed target experiments

Contribution ID: 29

Type: **not specified**

The DarkMesa experiment at Mainz

Wednesday, 9 April 2025 11:55 (25 minutes)

Presenter: DORIA, Luca (Johannes Gutenberg University Mainz)

Session Classification: Light dark matter search with electron-beam, fixed target experiments

Contribution ID: **30**

Type: **not specified**

LDM searches at MAGIX

Wednesday, 9 April 2025 12:20 (25 minutes)

Presenter: MERKEL, Harald (Institut fuer Kernphysik, Johannes Gutenberg-Universitaet Mainz)

Session Classification: Light dark matter search with electron-beam, fixed target experiments

Contribution ID: **31**

Type: **not specified**

Discussion

Wednesday, 9 April 2025 12:45 (15 minutes)

Session Classification: Light dark matter search with electron-beam, fixed target experiments

Contribution ID: 32

Type: **not specified**

Visible dark photon searches at JLab

Wednesday, 9 April 2025 14:30 (25 minutes)

Presenter: PAREMUZYAN, Rafayel

Session Classification: Light dark matter search with electron-beam, fixed target experiments

Contribution ID: 33

Type: **not specified**

The LDMX experiment

Wednesday, 9 April 2025 14:55 (25 minutes)

Presenter: WALLIN, Erik Jakob (Lund University)

Session Classification: Light dark matter search with electron-beam, fixed target experiments

Contribution ID: 34

Type: **not specified**

The NA64 experiment at CERN

Wednesday, 9 April 2025 15:20 (25 minutes)

Presenter: MARINI, Anna (Istituto Nazionale di Fisica Nucleare)

Session Classification: Light dark matter search with electron-beam, fixed target experiments

Contribution ID: 35

Type: **not specified**

Discussion

Wednesday, 9 April 2025 15:45 (15 minutes)

Session Classification: Light dark matter search with electron-beam, fixed target experiments

Contribution ID: 36

Type: **not specified**

Dark Particles at the LHC

Friday, 11 April 2025 09:00 (25 minutes)

Presenter: ARCADI, Giorgio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Light dark matter searches at LHC

Contribution ID: 37

Type: **not specified**

Coffee break

Thursday, 10 April 2025 11:00 (30 minutes)

Contribution ID: **38**

Type: **not specified**

Light dark matter searches at FASER

Thursday, 10 April 2025 16:00 (25 minutes)

Presenter: COCCARO, Andrea (Istituto Nazionale di Fisica Nucleare)

Session Classification: Light dark matter searches at proton beam, fixed-target experiments

Contribution ID: 39

Type: **not specified**

Light dark matter searches at NA62

Thursday, 10 April 2025 16:25 (25 minutes)

Presenter: JERHOT, Jan (Universite Catholique de Louvain (UCL) (BE))

Session Classification: Light dark matter searches at proton beam, fixed-target experiments

Contribution ID: 40

Type: **not specified**

The SHiP experiment at CERN

Thursday, 10 April 2025 16:50 (25 minutes)

Presenter: URSOV, Eduard (Humboldt-Universität zu Berlin)

Session Classification: Light dark matter searches at proton beam, fixed-target experiments

Contribution ID: 41

Type: **not specified**

Discussion

Thursday, 10 April 2025 18:05 (20 minutes)

Session Classification: Light dark matter searches at proton beam, fixed-target experiments

Contribution ID: 42

Type: **not specified**

Lunch break

Thursday, 10 April 2025 12:30 (1h 30m)

Contribution ID: 43

Type: **not specified**

Dark sector searches at Belle-II

Friday, 11 April 2025 11:30 (25 minutes)

Presenter: GRAZIANI, Enrico (Istituto Nazionale di Fisica Nucleare)

Session Classification: Light dark matter searches at electron/positron colliders

Contribution ID: 44

Type: **not specified**

Dark sector searches at BES3

Friday, 11 April 2025 11:55 (25 minutes)

Presenter: DING, Xiaoxuan

Session Classification: Light dark matter searches at electron/positron colliders

Contribution ID: 45

Type: **not specified**

Discussion

Friday, 11 April 2025 12:20 (15 minutes)

Session Classification: Light dark matter searches at electron/positron colliders

Contribution ID: 46

Type: **not specified**

Closeout

Friday, 11 April 2025 12:35 (25 minutes)

Contribution ID: 47

Type: **not specified**

LDM searches at Fermilab

Thursday, 10 April 2025 17:15 (25 minutes)

Presenter: TOUPS, Matt

Session Classification: Light dark matter searches at proton beam, fixed-target experiments

Contribution ID: 48

Type: **not specified**

Searches for X17 at accelerators

Contribution ID: 49

Type: **not specified**

The X17 boson: status and prospects

Thursday, 10 April 2025 09:00 (25 minutes)

Primary author: TONI, Claudio (Istituto Nazionale di Fisica Nucleare)

Presenter: TONI, Claudio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Searches for X17 at accelerators

Contribution ID: 50

Type: **not specified**

The PADME experiment

Presenter: BOSSI, Fabio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Searches for X17 at accelerators

Contribution ID: 51

Type: **not specified**

X17 searches at Atomki

Thursday, 10 April 2025 09:25 (25 minutes)

Presenter: KRASZNAHORKAY, Attila

Session Classification: Searches for X17 at accelerators

Contribution ID: 52

Type: **not specified**

Discussion

Thursday, 10 April 2025 10:40 (20 minutes)

Session Classification: Searches for X17 at accelerators

Contribution ID: 53

Type: **not specified**

The X17 experiment at LNL

Thursday, 10 April 2025 10:15 (25 minutes)

Presenter: MARCHI, Tommaso (INFN - LNL)

Session Classification: Searches for X17 at accelerators

Contribution ID: 54

Type: **not specified**

Recent X17 results from the MEG experiment

Thursday, 10 April 2025 09:50 (25 minutes)

Presenter: RENGA, Francesco (Istituto Nazionale di Fisica Nucleare)

Session Classification: Searches for X17 at accelerators

Contribution ID: 55

Type: **not specified**

The PADME experiment

Thursday, 10 April 2025 11:30 (25 minutes)

Presenter: SPADARO, Tommaso (Istituto Nazionale di Fisica Nucleare)

Session Classification: LDM searches with positron beams

Contribution ID: 56

Type: **not specified**

Positrons@JLab

Thursday, 10 April 2025 11:55 (25 minutes)

Presenters: MARSICANO, Luca (Istituto Nazionale di Fisica Nucleare); BISIO, Pietro (Istituto Nazionale di Fisica Nucleare)

Session Classification: LDM searches with positron beams

Contribution ID: 57

Type: **not specified**

Discussion

Thursday, 10 April 2025 12:20 (10 minutes)

Session Classification: LDM searches with positron beams

Contribution ID: 58

Type: **not specified**

Coherent

Thursday, 10 April 2025 14:00 (25 minutes)

Session Classification: Other searches at fixed target experiments

Contribution ID: 59

Type: **not specified**

mCharge search at beam dumps

Thursday, 10 April 2025 14:25 (25 minutes)

Presenter: Dr MCDUFFIE, Megan (Stony Brook University)

Session Classification: Other searches at fixed target experiments

Contribution ID: **60**

Type: **not specified**

Overview of PBC activities

Thursday, 10 April 2025 14:50 (25 minutes)

Presenter: FERBER, Torben (KIT)

Session Classification: Other searches at fixed target experiments

Contribution ID: **61**

Type: **not specified**

Discussion

Thursday, 10 April 2025 15:15 (15 minutes)

Session Classification: Other searches at fixed target experiments

Contribution ID: 62

Type: **not specified**

Saluti istituzionali

Tuesday, 8 April 2025 14:00 (10 minutes)

Presenter: TAIUTI, Mauro Gino (Istituto Nazionale di Fisica Nucleare)

Session Classification: Saluti Istituzionali

Contribution ID: 63

Type: **not specified**

SensCalc: a tool to calculate sensitivities of dark sector experiments

Thursday, 10 April 2025 17:40 (25 minutes)

Presenter: OVCHYNNIKOV, Maksym

Session Classification: Light dark matter searches at proton beam, fixed-target experiments