

**2nd Workshop on
electromagnetic dipole
moments of unstable particles**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Baryon polarisation mechanism (TBC)

Session Classification: Introduction

Contribution ID: 2

Type: **not specified**

Magnetic dipole moments of heavy baryons and quarks

Monday, 26 September 2022 09:20 (30 minutes)

Presenter: KOU, Emi Kou (LAL/IN2P3)

Session Classification: Introduction

Contribution ID: 3

Type: **not specified**

Electric dipole moments of heavy baryons and quarks

Monday, 26 September 2022 09:50 (30 minutes)

Presenter: SEVERT, Daniel (University of Bonn, HISKP)

Session Classification: Introduction

Contribution ID: 4

Type: **not specified**

Status of EDM searches and perspectives

Monday, 26 September 2022 11:00 (30 minutes)

Presenter: TEUBERT, Frederic

Session Classification: Introduction

Contribution ID: 5

Type: **not specified**

Discussion

Monday, 26 September 2022 12:30 (30 minutes)

Presenter: ALL

Session Classification: Introduction

Contribution ID: 6

Type: **not specified**

Proposed EDM experiments and perspectives for the future (TBC)

Presenters: SCHMIDT-WELLENBURG, Philipp (Paul Scherrer Institute); FREDERIC, Teubert

Session Classification: Introduction

Contribution ID: 7

Type: **not specified**

Welcome

Presenter: NERI, Nicola (University and INFN Milano)

Session Classification: Introduction

Contribution ID: 8

Type: **not specified**

Welcome and goals of the workshop

Monday, 26 September 2022 09:00 (20 minutes)

Presenter: NERI, Nicola (University and INFN Milano)

Session Classification: Introduction

Contribution ID: 9

Type: **not specified**

Muon and Tau $g-2$ and EDM results and perspectives

Monday, 26 September 2022 11:30 (30 minutes)

Presenter: LUSIANI, Alberto (Scuola Normale Superiore and INFN, sezione di Pisa)

Session Classification: Introduction

Contribution ID: **10**

Type: **not specified**

Heavy-hadron production in the very forward region

Monday, 26 September 2022 14:30 (30 minutes)

Presenter: ROJO, Juan (VU Amsterdam & Nikhef)

Session Classification: Fixed-target physics

Contribution ID: 11

Type: **not specified**

Baryon polarisation measurements in fixed-target collisions (TBC)

Presenter: AIDALA, Christine (University of Michigan)

Session Classification: Fixed-target physics

Contribution ID: 12

Type: **not specified**

Fixed-target experimental results and perspectives at LHCb

Monday, 26 September 2022 15:00 (30 minutes)

Presenter: ROBBE, Patrick

Session Classification: Fixed-target physics

Contribution ID: 13

Type: **not specified**

Round table discussion

Session Classification: Fixed-target physics

Contribution ID: 14

Type: **not specified**

Beam extraction, collimation, fixed-target experiment with bent crystals

Presenters: MIRARCHI, Daniele (CERN); REDAELLI, Stefano

Session Classification: Applications of bent crystals at accelerators

Contribution ID: 15

Type: **not specified**

Non-uniformity of bent crystal curvature: impact on channeling efficiency and mitigation strategy (CANCELLED)

Tuesday, 27 September 2022 10:30 (1 minute)

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

Session Classification: LHC machine and engineering

Contribution ID: 16

Type: **not specified**

Experimental proposals for MDM/EDM of charm baryons and tau lepton at LHC

Monday, 26 September 2022 15:30 (30 minutes)

Presenter: RUIZ VIDAL, Joan (IFIC-Valencia)

Session Classification: Fixed-target physics

Contribution ID: 17

Type: **not specified**

Round table discussion

Session Classification: Fixed-target physics

Contribution ID: **18**

Type: **not specified**

Amplitude analyses for MDM/EDM measurements

Presenter: MARANGOTTO, Daniele (University and INFN Milano)

Session Classification: LHC machine and engineering

Contribution ID: 19

Type: **not specified**

Charm baryon production and polarization in fixed-target collisions

Presenter: NIEL, Elisabeth (LAL, Orsay)

Session Classification: LHC machine and engineering

Contribution ID: 20

Type: **not specified**

Direct probe of tau dipole moments with bent crystals

Presenter: FOMIN, Oleksiy (LAL, CNRS et Université Paris-Sud, Orsay, France)

Session Classification: LHC machine and engineering

Contribution ID: 21

Type: **not specified**

Direct probe of tau dipole moments with bent crystals II

Presenter: RUIZ VIDAL, Joan (IFIC-Valencia)

Session Classification: LHC machine and engineering

Contribution ID: 22

Type: **not specified**

Round table discussion

Tuesday, 27 September 2022 10:31 (29 minutes)

Session Classification: LHC machine and engineering

Contribution ID: 23

Type: **not specified**

MD scenarios and operational considerations

Tuesday, 27 September 2022 10:00 (30 minutes)

Presenter: MIRARCHI, Daniele (CERN)

Session Classification: LHC machine and engineering

Contribution ID: 24

Type: **not specified**

Goniometer for precision positioning of bent crystals in the LHC

Tuesday, 27 September 2022 09:30 (30 minutes)

Presenter: DEMASSIEUX, Quentin Joel

Session Classification: LHC machine and engineering

Contribution ID: 25

Type: **not specified**

Layout and simulated Performance of a LHC Fixed-Target Test Stand

Tuesday, 27 September 2022 09:00 (30 minutes)

Presenter: HERMES, Pascal (CERN)

Session Classification: LHC machine and engineering

Contribution ID: 26

Type: **not specified**

Summary of experimental aspects

Wednesday, 28 September 2022 15:00 (30 minutes)

Presenter: FERRO-LUZZI, massimiliano (CERN)

Session Classification: Final session

Contribution ID: 27

Type: **not specified**

Standalone reconstruction and trigger with the SciFi detector

Presenter: HENRY, Louis (IFIC Valencia)

Session Classification: Final session

Contribution ID: 28

Type: **not specified**

Summary of physics opportunities and perspectives

Wednesday, 28 September 2022 14:30 (30 minutes)

Presenter: MARTINEZ-VIDAL, Fernando (IFIC (Universidad de Valencia-CSIC))

Session Classification: Final session

Contribution ID: 29

Type: **not specified**

DIPOLE-b proposal at LHC(b) and next steps

Presenter: MARTINEZ-VIDAL, Fernando (IFIC (Universidad de Valencia-CSIC))

Session Classification: Final session

Contribution ID: **30**

Type: **not specified**

Organisation matter and closeout

Wednesday, 28 September 2022 15:30 (30 minutes)

Presenter: NERI, Nicola (University and INFN Milano)

Session Classification: Final session

Contribution ID: **31**

Type: **not specified**

Simulations and analysis framework for the IR3 test

Tuesday, 27 September 2022 12:00 (30 minutes)

Presenter: MIAO, Han (Institute of High Energy Physics)

Session Classification: IR3 proof-of-principle test

Contribution ID: 32

Type: **not specified**

Geant4 channeling model: current status and perspectives (CANCELLED)

Tuesday, 27 September 2022 12:30 (1 minute)

Presenter: SYTOV, Alexei (Istituto Nazionale di Fisica Nucleare, Sezione di Ferrara; Korea Institute of Science and Technology Information)

Session Classification: IR3 proof-of-principle test

Contribution ID: 33

Type: **not specified**

Overview of the IR3 proof-of-principle test and beyond

Tuesday, 27 September 2022 11:30 (30 minutes)

Presenter: SPADARO NORELLA, Elisabetta (Istituto Nazionale di Fisica Nucleare)

Session Classification: IR3 proof-of-principle test

Contribution ID: 34

Type: **not specified**

VELOpix/Timepix detectors, electronics and DAQ

Tuesday, 27 September 2022 14:30 (30 minutes)

Presenter: COLLINS, paula (cern)

Session Classification: IR3 proof-of-principle test

Contribution ID: 35

Type: **not specified**

Particle ID detectors

Presenters: D'AMBROSIO, Carmelo (CERN, PH Dept.); FIORINI, Massimiliano (Istituto Nazionale di Fisica Nucleare)

Session Classification: IR3 proof-of-principle test

Contribution ID: 36

Type: **not specified**

Magnet and experimental layout (services and infrastructure)

Presenter: HERMES, Pascal (CERN)

Session Classification: IR3 proof-of-principle test

Contribution ID: 37

Type: **not specified**

Measurement of MDM/EDM of Lambda baryon at LHCb

Wednesday, 28 September 2022 09:00 (20 minutes)

Presenter: JAIMES, Sergio (IFIC-UV)

Session Classification: Long-lived particles

Contribution ID: **38**

Type: **not specified**

Reconstruction of decay vertex for long-lived particles

Wednesday, 28 September 2022 11:20 (20 minutes)

Presenter: TONANI, Giorgia (Istituto Nazionale di Fisica Nucleare)

Session Classification: Long-lived particles

Contribution ID: 39

Type: **not specified**

Adding RICH information for T track reconstruction

Wednesday, 28 September 2022 11:40 (20 minutes)

Presenter: WANG, mengzhen (INFN milano)

Session Classification: Long-lived particles

Contribution ID: 40

Type: **not specified**

Trigger strategy for long-lived particles

Wednesday, 28 September 2022 12:00 (20 minutes)

Presenter: AGAPOPOULOU, Christina (CNRS)

Session Classification: Long-lived particles

Contribution ID: 41

Type: **not specified**

Polarisation measurements of Lambda baryons in LHCb

Wednesday, 28 September 2022 09:20 (20 minutes)

Presenter: WANG, Ziyi (UCAS)

Session Classification: Long-lived particles

Contribution ID: 42

Type: **not specified**

Measurement of charm baryons cross-section and production asymmetry in fixed-target collisions

Monday, 26 September 2022 17:30 (30 minutes)

Presenter: NIEL, Elisabeth (LAL)

Session Classification: Production and polarisation measurements of charm baryons

Contribution ID: 43

Type: **not specified**

LLP physics at LHCb

Wednesday, 28 September 2022 09:40 (30 minutes)

Presenter: REDI, Federico Leo (EPFL - Ecole Polytechnique Federale Lausanne (CH))

Session Classification: Long-lived particles

Contribution ID: 44

Type: **not specified**

Charm baryon amplitude analysis and polarization measurements

Monday, 26 September 2022 16:30 (30 minutes)

Presenter: MARANGOTTO, Daniele (Istituto Nazionale di Fisica Nucleare)

Session Classification: Production and polarisation measurements of charm baryons

Contribution ID: 45

Type: **not specified**

Measurement of charm baryons polarisation in fixed-target collisions

Monday, 26 September 2022 17:00 (30 minutes)

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

Session Classification: Production and polarisation measurements of charm baryons

Contribution ID: 46

Type: **not specified**

Reconstruction of long-lived particles in LHCb using T tracks

Wednesday, 28 September 2022 11:00 (20 minutes)

Presenter: SANDERSWOOD, Izaak (Instituto de Física Corpuscular (Universitat de València))

Session Classification: Long-lived particles

Contribution ID: 47

Type: **not specified**

Welcome cocktail

Sunday, 25 September 2022 18:00 (1 hour)

Contribution ID: 48

Type: **not specified**

Charged particle tracking and event reconstruction for the IR3 test

Tuesday, 27 September 2022 12:31 (29 minutes)

Presenter: GRABOWSKI, Jascha

Session Classification: IR3 proof-of-principle test

Contribution ID: 49

Type: **not specified**

Developments in dipole magnet technology

Tuesday, 27 September 2022 17:30 (30 minutes)

Presenter: SORBI, Massimo (Istituto Nazionale di Fisica Nucleare)

Session Classification: New ideas and future developments

Contribution ID: 50

Type: **not specified**

Improved experimental layout with focusing crystals

Tuesday, 27 September 2022 16:30 (30 minutes)

Presenter: RUIZ VIDAL, Joan (IFIC-Valencia)

Session Classification: New ideas and future developments

Contribution ID: 51

Type: **not specified**

Particle ID detectors for charged hadrons

Presenter: D'AMBROSIO, Carmelo (CERN, PH Dept.)

Session Classification: New ideas and future developments

Contribution ID: 52

Type: **not specified**

Possibility of spin precession in high-field magnet

Tuesday, 27 September 2022 17:00 (30 minutes)

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

Session Classification: New ideas and future developments

Contribution ID: 53

Type: **not specified**

T track reconstruction

Wednesday, 28 September 2022 10:10 (20 minutes)

Presenter: HENRY, Louis (Universita di Milano, IFIC)

Session Classification: Long-lived particles

Contribution ID: 54

Type: **not specified**

Discussion on Letter of Intent

Tuesday, 27 September 2022 15:00 (1 hour)

Presenters: ALL; NERI, Nicola (University and INFN Milano)

Session Classification: IR3 proof-of-principle test

Contribution ID: 55

Type: **not specified**

Experimental proposal for muon EDM at PSI

Monday, 26 September 2022 12:00 (30 minutes)

Presenter: SCHMIDT-WELLENBURG, Philipp (Paul Scherrer Institute)

Session Classification: Introduction

Contribution ID: 56

Type: **not specified**

Round table discussion

Session Classification: IR3 proof-of-principle test