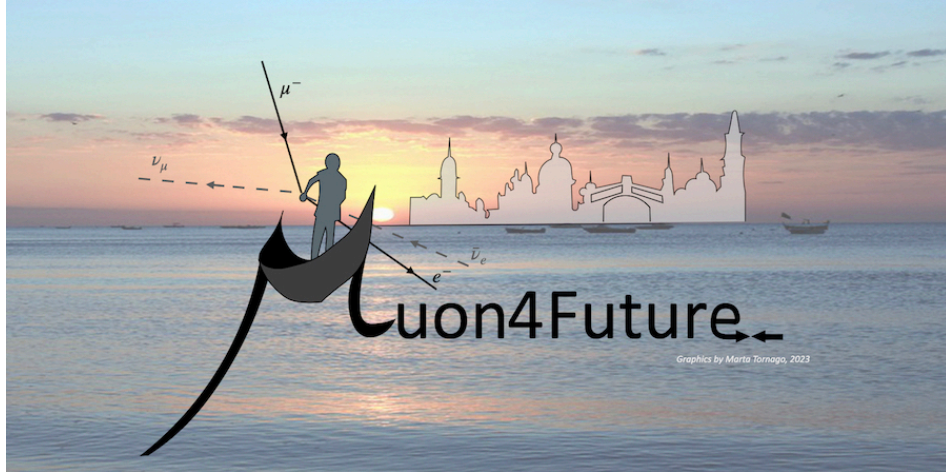


Muon4Future



Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome the workshop

Monday, 29 May 2023 13:30 (10 minutes)

Presenter: LUCCHESI, Donatella (Istituto Nazionale di Fisica Nucleare)

Contribution ID: 2

Type: **not specified**

Summary of the Workshop

Session Classification: Discussion on Sinergies

Contribution ID: 3

Type: **not specified**

High intensity muon beam project at PSI

Monday, 29 May 2023 14:00 (30 minutes)

Presenter: PAPA, Angela (Paul Scherrer Institut)

Session Classification: Present and Future Muon Facilities

Contribution ID: 4

Type: **not specified**

Advanced muon facility at Fermilab

Monday, 29 May 2023 14:30 (30 minutes)

Presenter: BERNSTEIN, Robert Bernstein (Fermilab)

Session Classification: Present and Future Muon Facilities

Contribution ID: 5

Type: **not specified**

J-PARC muon facility

Monday, 29 May 2023 15:00 (30 minutes)

Presenter: YAMAZAKI, Takayuki (KEK)

Session Classification: Present and Future Muon Facilities

Contribution ID: 6

Type: **not specified**

Muon collider demonstrator project and CERN muon facility

Monday, 29 May 2023 15:50 (30 minutes)

Presenter: ROGERS, Chris (RAL)

Session Classification: Present and Future Muon Facilities

Contribution ID: 7

Type: **not specified**

Guided discussion on muon facilities activities and synergies

Monday, 29 May 2023 16:20 (30 minutes)

Presenter: DIEMOZ, Marcella (Istituto Nazionale di Fisica Nucleare)

Session Classification: Present and Future Muon Facilities

Contribution ID: 8

Type: **not specified**

Muon ionization cooling results and prospects

Monday, 29 May 2023 17:20 (20 minutes)

Presenter: LONG, Kenneth

Session Classification: Muon Beams Technologies

Contribution ID: 9

Type: **not specified**

Current experimental activities on Muonium

Monday, 29 May 2023 17:40 (20 minutes)

Presenter: IWAI, Ryoto (KEK)

Session Classification: Muon Beams Technologies

Contribution ID: 10

Type: **not specified**

Muon cooling at J-PARC

Monday, 29 May 2023 18:00 (20 minutes)

Presenter: KAMIOKA, Shusei (KEK)

Session Classification: Muon Beams Technologies

Contribution ID: 11

Type: **not specified**

Muon cooling at PSI

Monday, 29 May 2023 18:20 (20 minutes)

Presenter: LO SPALLUTO, Giuseppe

Session Classification: Muon Beams Technologies

Contribution ID: 12

Type: **not specified**

High energy muon collisions status and challenges

Monday, 29 May 2023 18:40 (30 minutes)

Presenter: SCHULTE, Daniel

Session Classification: Muon Beams Technologies

Contribution ID: 13

Type: **not specified**

Guided discussion on muon technologies and possible synergies among them

Monday, 29 May 2023 19:10 (30 minutes)

Presenter: BONESINI, Maurizio Giorgio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Muon Beams Technologies

Contribution ID: 14

Type: **not specified**

The broad physics case of a muon collider

Tuesday, 30 May 2023 09:00 (30 minutes)

Presenter: CRAIG, Nathaniel (University of California, Santa Barbara)

Session Classification: Physics with High Energy Muon Beams

Contribution ID: 15

Type: **not specified**

muTristan physics possibilities

Tuesday, 30 May 2023 09:30 (30 minutes)

Presenter: KITANO, Ryuichiro (Theory Center, KEK)

Session Classification: Physics with High Energy Muon Beams

Contribution ID: 16

Type: **not specified**

Challenges and synergies of a detector at high energy muon collider

Tuesday, 30 May 2023 10:00 (30 minutes)

Presenter: PAGAN GRISO, Simone (LBNL)

Session Classification: Physics with High Energy Muon Beams

Contribution ID: 17

Type: **not specified**

Guided discussion high energy muon beam physics and possible synergies

Tuesday, 30 May 2023 10:30 (30 minutes)

Presenter: CESAROTTI, Cari

Session Classification: Physics with High Energy Muon Beams

Contribution ID: **18**

Type: **not specified**

Theory overview of muon $g-2$ and EDM

Tuesday, 30 May 2023 12:00 (30 minutes)

Presenter: PARADISI, Paride (Istituto Nazionale di Fisica Nucleare)

Session Classification: Muon Magnetic Moment and $g-2$

Contribution ID: 19

Type: **not specified**

Muon g-2 and EDM at Fermilab

Tuesday, 30 May 2023 12:30 (20 minutes)

Presenter: FOSTER, Sean (Boston University)

Session Classification: Muon Magnetic Moment and g-2

Contribution ID: 20

Type: **not specified**

Muon g-2 and EDM at J-PARC

Tuesday, 30 May 2023 12:50 (20 minutes)

Presenter: ONDERWATER, Gerco

Session Classification: Muon Magnetic Moment and g-2

Contribution ID: 21

Type: **not specified**

Muon $g-2$ and EDM at PSI

Tuesday, 30 May 2023 13:10 (20 minutes)

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

Session Classification: Muon Magnetic Moment and $g-2$

Contribution ID: 22

Type: **not specified**

Guided discussion on muon magnetic moment, g-2 and HVP on current results, future possibilities and synergies among experiments and facilities

Tuesday, 30 May 2023 16:30 (30 minutes)

Presenter: DRIUTTI, Anna

Session Classification: Hadronic Vacuum Polarization

Contribution ID: 23

Type: **not specified**

Hadronic Vacuum Polarization dispersive and data-driven methods

Tuesday, 30 May 2023 14:30 (30 minutes)

Presenter: COLANGELO, Gilberto

Session Classification: Hadronic Vacuum Polarization

Contribution ID: 24

Type: **not specified**

Hadronic Vacuum Polarization on lattice

Tuesday, 30 May 2023 15:00 (30 minutes)

Presenter: FODOR, Zoltan (University of Wuppertal)

Session Classification: Hadronic Vacuum Polarization

Contribution ID: 25

Type: **not specified**

The MuonE experiment

Tuesday, 30 May 2023 15:30 (30 minutes)

Presenter: POCANIC, Dinko (University of Virginia)

Session Classification: Hadronic Vacuum Polarization

Contribution ID: 26

Type: **not specified**

R-ratio measurements

Tuesday, 30 May 2023 16:00 (30 minutes)

Presenter: ALIBERTI, Riccardo

Session Classification: Hadronic Vacuum Polarization

Contribution ID: 27

Type: **not specified**

Discussion

Session Classification: Hadronic Vacuum Polarization

Contribution ID: 28

Type: **not specified**

Charge Lepton Flavor Violation in muons:theory overview

Tuesday, 30 May 2023 11:30 (30 minutes)

Presenter: TEIXEIRA, Ana M. (LPC Clermont-Ferrant)

Session Classification: Muon Magnetic Moment and g-2

Contribution ID: 29

Type: **not specified**

Charge Lepton Flavor Violation: experimental activities

Tuesday, 30 May 2023 17:30 (30 minutes)

Presenter: FUJII, Yuki

Session Classification: Charge Lepton Flavor Violation

Contribution ID: **30**

Type: **not specified**

Lepton Flavor Violation in axion-like particles

Tuesday, 30 May 2023 18:00 (30 minutes)

Presenter: RENNER, Sophie

Session Classification: Charge Lepton Flavor Violation

Contribution ID: 31

Type: **not specified**

Future mu to e-gamma experiments

Wednesday, 31 May 2023 09:00 (30 minutes)

Presenter: VOENA, Cecilia (Istituto Nazionale di Fisica Nucleare)

Session Classification: Charge Lepton Flavor Violation

Contribution ID: 32

Type: **not specified**

Future mu to e conversion experiments

Wednesday, 31 May 2023 09:30 (30 minutes)

Presenter: PEZZULLO, Gianantonio (Yale University)

Session Classification: Charge Lepton Flavor Violation

Contribution ID: 33

Type: **not specified**

Z-dependence in mu to e conversion

Session Classification: Charge Lepton Flavor Violation

Contribution ID: 34

Type: **not specified**

Guided discussion on CLFV on current results, future possibilities and synergies among experiments

Wednesday, 31 May 2023 10:00 (30 minutes)

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

Session Classification: Charge Lepton Flavor Violation

Contribution ID: 35

Type: **not specified**

Muography: overview, applications and future developments

Wednesday, 31 May 2023 11:00 (30 minutes)

Presenter: SARACINO, Giulio (Istituto Nazionale di Fisica Nucleare)

Session Classification: Muons in Other Fields

Contribution ID: 36

Type: **not specified**

The muon ISIS facility at RAL and applications

Wednesday, 31 May 2023 11:30 (30 minutes)

Presenter: HILLIER, Adrian

Session Classification: Muons in Other Fields

Contribution ID: 37

Type: **not specified**

Muons for cultural heritage

Wednesday, 31 May 2023 12:00 (25 minutes)

Presenter: AL MOUSSAWI, Marwa

Session Classification: Muons in Other Fields

Contribution ID: 38

Type: **not specified**

Nuclear reactor imaging using muography (TBA)

Session Classification: Muons in Other Fields

Contribution ID: 39

Type: **not specified**

Introduction to μ SR and a quick overview of the S μ S facility instruments at PSI

Wednesday, 31 May 2023 12:25 (25 minutes)

Presenter: LUETKENS, hubertus

Session Classification: Muons in Other Fields

Contribution ID: 40

Type: **not specified**

Guided discussion on muon application in other fields

Wednesday, 31 May 2023 12:50 (30 minutes)

Presenter: AMAPANE, Nicola Carlo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Muons in Other Fields

Contribution ID: 41

Type: **not specified**

Summary of the Workshop and next steps

Wednesday, 31 May 2023 14:30 (30 minutes)

Contribution ID: 42

Type: **not specified**

Muon activity at the ESS facility

Monday, 29 May 2023 15:30 (20 minutes)

Presenter: DRACOS, Marcos (IPHC-IN2P3/CNRS)

Session Classification: Present and Future Muon Facilities

Contribution ID: 43

Type: **not specified**

Registration and welcome lunch

Monday, 29 May 2023 12:30 (1 hour)

A light lunch will be offered while registration at the secretariat desk is going on.

Contribution ID: 44

Type: **not specified**

Introduction to the wine and cheese tasting event

There will presented a few slides to explain how the “wine & cheese” event will go on. Some instructions on how to taste wines and some useful information about the wines that will be served, will be given by experts.

Contribution ID: 45

Type: **not specified**

Introduction to the workshop

Monday, 29 May 2023 13:40 (20 minutes)

Presenter: MEADE, Patrick

Contribution ID: 46

Type: **not specified**

Workshop Photo

Contribution ID: 47

Type: **not specified**

Introduction to the wine and cheese testing

Tuesday, 30 May 2023 18:40 (20 minutes)