

Muon Collider Physics Benchmark Workshop

Report of Contributions

Contribution ID: 1

Type: **not specified**

Motivation talk

Thursday, 16 November 2023 09:00 (30 minutes)

Presenter: ARKANI-HAMED, Nima (IAS)

Session Classification: Thursday Morning I

Contribution ID: 2

Type: **not specified**

Accelerator development

Thursday, 16 November 2023 09:45 (30 minutes)

Presenter: STRATAKIS, Diktys

Session Classification: Thursday Morning I

Contribution ID: 3

Type: **not specified**

Perspectives on Future Energy Frontier Colliders

Thursday, 16 November 2023 11:00 (30 minutes)

Presenter: Dr PALMER, mark (BNL)

Session Classification: Thursday Morning II

Contribution ID: 4

Type: **not specified**

General detector issues

Thursday, 16 November 2023 11:45 (30 minutes)

Presenter: Prof. BLACK, Kevin (University of Wisconsin-Madison)

Session Classification: Thursday Morning II

Contribution ID: 5

Type: **not specified**

Factorization/fragmentation etc

Thursday, 16 November 2023 14:00 (30 minutes)

Presenter: STERMAN, George

Session Classification: Thursday Afternoon I

Contribution ID: 6

Type: **not specified**

EW corrections: Sudakov, NLO and more

Thursday, 16 November 2023 14:45 (30 minutes)

Presenter: PAGANI, Davide (Universita e INFN, Bologna (IT))

Session Classification: Thursday Afternoon I

Contribution ID: 7

Type: **not specified**

Detector development for muC

Thursday, 16 November 2023 16:00 (30 minutes)

Presenter: DI PETRILLO, Karri Folan (University of Chicago)

Session Classification: Thursday Afternoon II

Contribution ID: 8

Type: **not specified**

Physics benchmarks at a muC

Friday, 17 November 2023 09:00 (30 minutes)

Presenters: WULZER, Andrea (IFAE and ICREA – Barcelona, Spain); WULZER, Andrea; WULZER, Andrea (Universita e INFN, Padova (IT)); WULZER, andrea (ETH-Zurich)

Session Classification: Friday Morning I

Contribution ID: 9

Type: **not specified**

BSM benchmarks for muC

Friday, 17 November 2023 09:45 (30 minutes)

Presenter: CAPDEVILLA, Rodolfo (Fermi National Accelerator Laboratory)

Session Classification: Friday Morning I

Contribution ID: **10**

Type: **not specified**

Physics at lepton colliders: SM & Beyond

Friday, 17 November 2023 11:00 (30 minutes)

Presenters: REUTER, Juergen (DESY Hamburg, Germany); REUTER, Jürgen

Session Classification: Friday Morning II

Contribution ID: 11

Type: **not specified**

mu+ cooling and a mu+e collider

Friday, 17 November 2023 11:45 (30 minutes)

Presenter: KITANO, Ryuichiro

Session Classification: Friday Morning II

Contribution ID: 12

Type: **not specified**

Low Energy Muon Beams

Friday, 17 November 2023 16:00 (15 minutes)

Presenter: CESAROTTI, Cari

Session Classification: Friday Afternoon II

Contribution ID: 13

Type: **not specified**

Searching for Leptophilic Z' at Future Muon Collider

Friday, 17 November 2023 16:20 (15 minutes)

Presenter: Ms WANG, Si

Session Classification: Friday Afternoon II

Contribution ID: 14

Type: **not specified**

Composite Resonances at the High Energy Muon Collider

Friday, 17 November 2023 16:40 (15 minutes)

Presenter: Dr LIU, Da (University of Pittsburgh)

Session Classification: Friday Afternoon II

Contribution ID: 15

Type: **not specified**

Inclusive Higgs Rate and Forward Detection at Muon Collider

Friday, 17 November 2023 17:00 (15 minutes)

Presenter: LYU, Kunfeng (University of Minnesota)

Session Classification: Friday Afternoon II

Contribution ID: 16

Type: **not specified**

neutrino physics and muC synergy

Saturday, 18 November 2023 09:00 (30 minutes)

Presenter: TABRIZI, Zahra (Northwestern University)

Session Classification: Saturday Morning I

Contribution ID: 17

Type: **not specified**

g-2 and flavor physics

Saturday, 18 November 2023 09:45 (30 minutes)

Presenter: BUTTAZZO, Dario (Universita & INFN Pisa (IT))

Session Classification: Saturday Morning I

Contribution ID: **18**

Type: **not specified**

WIMP DM

Saturday, 18 November 2023 11:00 (30 minutes)

Presenter: FRANCESCHINI, Roberto (Rome 3 U.)

Session Classification: Saturday Morning II

Contribution ID: **19**

Type: **not specified**

Inspirational talk

Saturday, 18 November 2023 11:45 (30 minutes)

Presenter: SUNDRUM, Raman

Session Classification: Saturday Morning II

Contribution ID: **20**

Type: **not specified**

Concluding Remarks

Saturday, 18 November 2023 12:30 (10 minutes)

Presenter: HAN, Tao

Session Classification: Saturday Morning II

Contribution ID: **21**

Type: **not specified**

EW Factorization

Friday, 17 November 2023 14:00 (15 minutes)

Presenter: XIE, Keping (University of Pittsburgh)

Session Classification: Friday Afternoon I

Contribution ID: 22

Type: **not specified**

SM PDFs:☒ why and how

Friday, 17 November 2023 14:20 (15 minutes)

Presenter: MARZOCCA, David (INFN Trieste)

Session Classification: Friday Afternoon I

Contribution ID: 23

Type: **not specified**

Muon Colliders and Complementary Probes

Friday, 17 November 2023 14:40 (15 minutes)

Presenter: HOMILLER, Samuel (Harvard University)

Session Classification: Friday Afternoon I

Contribution ID: 24

Type: **not specified**

ALP @ muC

Friday, 17 November 2023 15:00 (15 minutes)

Presenter: WANG, Xing (UC San Diego)

Session Classification: Friday Afternoon I

Contribution ID: 25

Type: **not specified**

Detector simulations for a 10 TeV muC

Thursday, 16 November 2023 16:45 (30 minutes)

Presenters: ROSSER, Benjamin John (University of Chicago (US)); MELONI, Federico (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Thursday Afternoon II