

Riunione Annuale RD_MUCOL



Report of Contributions

Contribution ID: 1

Type: **not specified**

Muon Collider: Gateway to High-Energy and Precision Frontier

Wednesday 3 December 2025 14:00 (1 hour)

Seminario

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

Contribution ID: 2

Type: **not specified**

Wecome

Monday 1 December 2025 14:00 (10 minutes)

Session Classification: The big picture

Contribution ID: 3

Type: **not specified**

Physics perspectives at a muon collider

Monday 1 December 2025 14:10 (50 minutes)

Presenter: MARZOCCA, David (Istituto Nazionale di Fisica Nucleare)

Session Classification: The big picture

Contribution ID: 4

Type: **not specified**

Muon Collider @ Italy status

Monday 1 December 2025 15:00 (50 minutes)

Presenter: PASTRONE, Nadia (Istituto Nazionale di Fisica Nucleare)

Session Classification: The big picture

Contribution ID: 5

Type: **not specified**

Summary of the IMCC Demonstrator Workshop and future prospects

Monday 1 December 2025 16:40 (1 hour)

Presenter: GIOVE, Dario Augusto (Istituto Nazionale di Fisica Nucleare)

Session Classification: The big picture

Contribution ID: 6

Type: **not specified**

Summary of the IMCC Demonstrator Workshop in Milan

Session Classification: R&D Accelerator and Demonstrator

Contribution ID: 7

Type: **not specified**

Beam monitors

Presenter: ZULIANI, Davide (Istituto Nazionale di Fisica Nucleare)

Session Classification: Muon Cooling Demonstrator

Contribution ID: 8

Type: **not specified**

Muon-nucleon scattering measurement

Tuesday 2 December 2025 11:45 (30 minutes)

Presenter: HAN, Qundong (Istituto Nazionale di Fisica Nucleare)

Session Classification: Muon Cooling Demonstrator

Contribution ID: 9

Type: **not specified**

Neutrino low energy cross sections at the demonstrator and TPC R&D

Tuesday 2 December 2025 12:15 (30 minutes)

Presenter: OSPINA ESCOBAR, Nataly (Istituto Nazionale di Fisica Nucleare)

Session Classification: Muon Cooling Demonstrator

Contribution ID: **10**

Type: **not specified**

The MUSIC detector concept

Tuesday 2 December 2025 14:30 (30 minutes)

Presenter: GARGIULO, Ruben (Istituto Nazionale di Fisica Nucleare)

Session Classification: Detector Design and R&D

Contribution ID: **11**

Type: **not specified**

Forward muons detection

Tuesday 2 December 2025 15:00 (30 minutes)

Presenter: CASTELLI, Luca (Università La Sapienza e INFN Roma1)

Session Classification: Detector Design and R&D

Contribution ID: **12**

Type: **not specified**

Detector design with AI

Tuesday 2 December 2025 15:30 (30 minutes)

Presenter: NARDI, Federico (Università di Padova, LPCA Clermont)

Session Classification: Detector Design and R&D

Contribution ID: **13**

Type: **not specified**

Higgs boson to photons

Tuesday 2 December 2025 17:00 (20 minutes)

Presenter: RAGHIB, Imran (INFN Firenze)

Session Classification: Physics

Contribution ID: 14

Type: **not specified**

Higgs boson to WW

Tuesday 2 December 2025 17:20 (20 minutes)

Presenter: PIZZATI, Francesco (Università di Trieste and INFN Trieste)

Session Classification: Physics

Contribution ID: 15

Type: **not specified**

Status and prospects for tracking R&D

Wednesday 3 December 2025 09:30 (20 minutes)

Session Classification: Detector technology and R&D

Contribution ID: 16

Type: **not specified**

Status and prospects for CRILIN R&D

Wednesday 3 December 2025 09:50 (20 minutes)

Presenter: DI MECO, Elisa (Istituto Nazionale di Fisica Nucleare)

Session Classification: Detector technology and R&D

Contribution ID: 17

Type: **not specified**

Status and prospects for MPGD HCAL R&D

Wednesday 3 December 2025 10:10 (20 minutes)

Presenter: GENEROSO, Lisa (Istituto Nazionale di Fisica Nucleare)

Session Classification: Detector technology and R&D

Contribution ID: **18**

Type: **not specified**

Status and prospects for PICOSEC R&D

Wednesday 3 December 2025 10:30 (20 minutes)

Presenter: BRUNOLDI, Matteo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Detector technology and R&D

Contribution ID: **19**

Type: **not specified**

Software task force report

Wednesday 3 December 2025 09:00 (30 minutes)

Presenter: ANDREETTO, Paolo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Software

Contribution ID: **20**

Type: **not specified**

Detector magnet

Tuesday 2 December 2025 16:00 (30 minutes)

Presenter: ALFONSO, Luca (Istituto Nazionale di Fisica Nucleare)

Session Classification: Detector Design and R&D

Contribution ID: **21**

Type: **not specified**

ESPPU Summary

Monday 1 December 2025 15:50 (50 minutes)

Presenter: NISATI, Aleandro (Istituto Nazionale di Fisica Nucleare)

Session Classification: The big picture

Contribution ID: 22

Type: **not specified**

Demonstrator overview and siting

Session Classification: Muon Cooling Demonstrator: Technologies

Contribution ID: 23

Type: **not specified**

Demonstrator magnets R&D

Tuesday 2 December 2025 09:00 (30 minutes)

Presenter: SCARANTINO, Giuseppe (University of Rome "La Sapienza")

Session Classification: Muon Cooling Demonstrator: Technologies

Contribution ID: 24

Type: **not specified**

Demonstrator RF R&D

Tuesday 2 December 2025 09:30 (30 minutes)

Presenter: GIOVE, Dario Augusto (Istituto Nazionale di Fisica Nucleare)

Session Classification: Muon Cooling Demonstrator: Technologies

Contribution ID: 25

Type: **not specified**

Beam monitors

Tuesday 2 December 2025 10:00 (30 minutes)

Presenter: ZULIANI, Davide (Istituto Nazionale di Fisica Nucleare)

Session Classification: Muon Cooling Demonstrator: Technologies

Contribution ID: 26

Type: **not specified**

Physics applications with the demonstrator

Tuesday 2 December 2025 11:15 (30 minutes)

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

Session Classification: Muon Cooling Demonstrator

Contribution ID: 27

Type: **not specified**

Higgs boson to bb and double Higgs

Tuesday 2 December 2025 17:40 (30 minutes)

Presenter: SESTINI, Lorenzo (Istituto Nazionale di Fisica Nucleare)

Session Classification: Physics

Contribution ID: 28

Type: **not specified**

The MUSIC detector

Session Classification: Open discussion: IMCC Italy in the next years (detector, magnets and RFs, ionizing cooling facility)

Contribution ID: 29

Type: **not specified**

The ionizing cooling facility

Session Classification: Open discussion: IMCC Italy in the next years (detector, magnets and RFs, ionizing cooling facility)

Contribution ID: **30**

Type: **not specified**

LGAD R&D for muon collider tracking

Wednesday 3 December 2025 11:20 (20 minutes)

Session Classification: Detector technology and R&D